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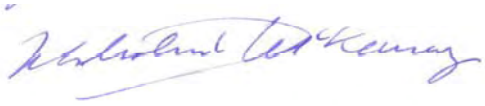
27 PENHILL ROAD, LANCING,
WEST SUSSEX BN15 8HA

Preliminary Contamination Risk Assessment

February 2011

eas
Environmental Assessment Services Ltd

REPORT DATA SHEET

Requirement	**Data**
Report Ref:	Chadwick/1/PenhillRd
Date	February 2011
Client	Chadwick Homes Ltd
Report type	Preliminary Contamination Risk Assessment
Purpose	Submission to Planning
Revisions	N/A
Prepared by	Clare Silver BSc (Hons) Signed
Approved by	Eur Ing Malcolm McKemey BSc (Hons), CEng, CEnv, MICE, MIEAust, MCIWEM, MIEnvSc Signed 

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Preliminary Contamination Risk Assessment

February 2011

CONTENTS

1. CAUTION
2. THE SITE
3. GEOLOGY & HYDROGEOLOGICAL CONSIDERATIONS
4. SITE DEVELOPMENT HISTORY
5. THE EXISTING SITE
6. POTENTIAL SOURCES OF CONTAMINATION
7. CONCLUSIONS
8. RECOMMENDATIONS

APPENDICES

APPENDIX A Development Plans
APPENDIX B GroundSure/EA Data
APPENDIX C Adur & Worthing Councils' Environmental Health Department
APPENDIX D Radon Check

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Preliminary Contamination Risk Assessment

February 2011

1. CAUTION

1.1 This investigation relies largely on a superficial examination of the site plus a review of data from Adur District Council planning and Environmental Health Departments, and the Environment Agency (EA). Even where no previous contaminating activity has been identified, it is possible that the site could be contaminated due to fly tipping or other unrecorded events. The age of a building may indicate probability but cannot be treated as proof of the absence or presence of asbestos. This report does not attempt to comment on the commercial value or viability of the site.

2. THE SITE

2.1 The site comprises 0.11 hectares of former residential and commercial land at 27 Penhill Road in Lancing, West Sussex. The Ordnance Survey (OS) map reference for the site is TQ 1836 0418 and the site elevation is approximately + 5 m OD. See Figure 1: Site Location.

2.2 The site is to be redeveloped for four three-bedroom houses in terrace and one three-bedroom detached house with ten car parking spaces, cycle storage and refuse/recycling storage. The development plans are provided in Appendix A.

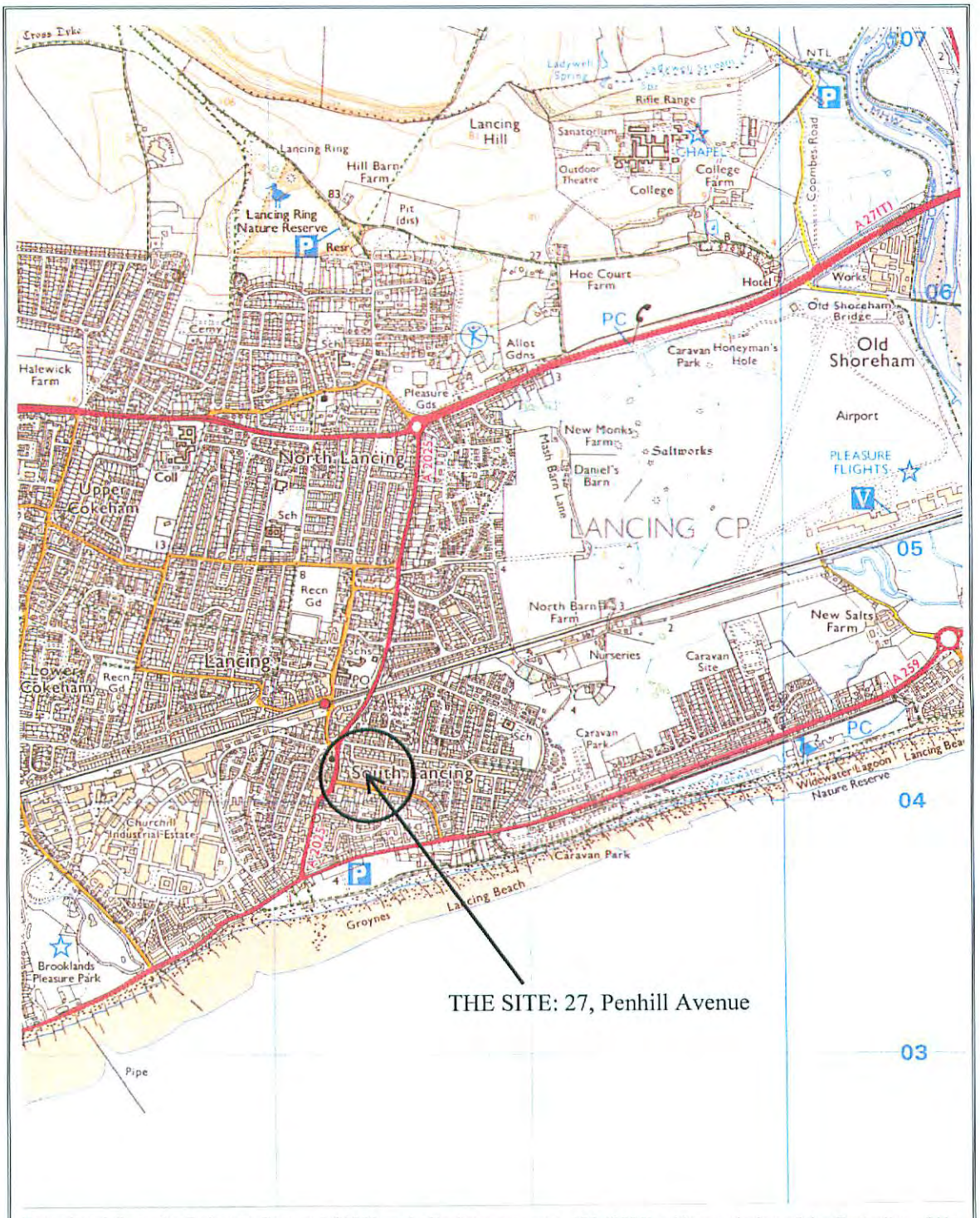
3. GEOLOGY & HYDROGEOLOGICAL CONSIDERATIONS

3.1 According to the British Geological Survey (Sheet No. 318/333), the site lies on late Pleistocene Brickearth (Brown Silt) over Cretaceous Upper/Middle Chalk (Newhaven Formation).

3.2 The site lies on a Principal Aquifer (the Chalk). The site does not lie within a groundwater source protection zone. See Appendix B.

3.3 The Brickearth was excavated for brick making, notably in the mid-late C19th. The site is on a former brickfield.

3.4 There do not appear to be any active or closed waste disposal landfills within 250 m of the site. The nearest appears to be the historic Brooklands landfill some 1000 m to the west. See Appendix B.



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Preliminary Contamination Risk Assessment

Fig. 1 SITE LOCATION PLAN

February 2011 Scale 1:25000

3.5 The Environment Agency Flood map shows the site to lie in Flood Zone 1 (low risk of flooding). See Appendix B.

4. SITE DEVELOPMENT HISTORY

4.1 The site development history is derived from a review of historic maps and other references. See Table 4.1 below for a summary of the site history and key historic features. See also Figures 2 to 11.

TABLE 4.1
SUMMARY OF KEY HISTORIC SITE FEATURES

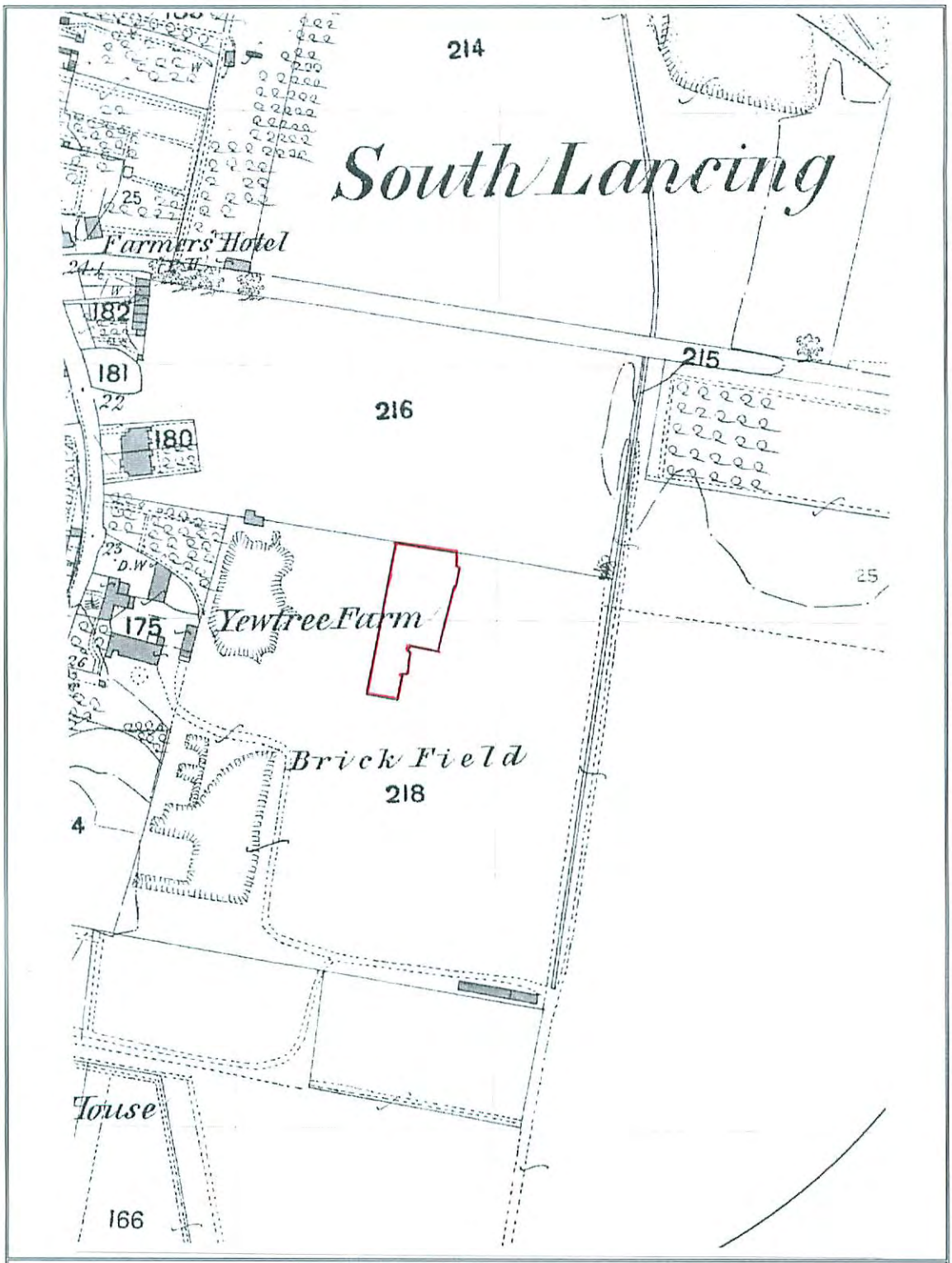
OS plan date	The Site	Key Features/changes within the Surrounding Area
1873	Part of brickfield at Yewtree Farm (not shown excavated)	Part of brickfield; South Lancing village located to the west; orchards and gravel pits shown in surrounding area
1878	No change shown	No change
1898	Undeveloped plot on site of former brickfield	Residences on land adjacent to east and west site boundaries; Penhill Road developed along southern boundary; numerous plant nurseries and glasshouses in surrounding area including glasshouses adjacent to northeastern corner of site; brickfields shown to the south and north; tanks (nearest is 70 m north); windmills
1912	No change shown	Brickfield to immediate north now disused; brickfield to south of Penhill Road developed with housing and nurseries; more housing development on Penhill Road and in vicinity
1932	Small building at the eastern edge in southern half of the site	Further development to south of Penhill Road (housing, amenities etc); brickfield to north-northeast disused and land adjacent developed for nursery glasshouses; reduction in orchards
1943	Small building no longer visible	Nurseries immediately to north removed and replaced with housing along Ingleside Crescent; other land surrounding the site extensively developed with additional houses, nurseries etc
War-time	No incidents of activities identified at the site.	Bomb hits and aeroplane crashes in the Lancing area – none close to the site
1952	Building shown in northern half of the site (No.29 Penhill Road)	Further development of amenities and residences in locality; new pumping station immediately to east of site

1960	House (No. 27) built in southern half of site along Penhill Road	No major changes in local area. Fewer glasshouses to the north of the site
1970	No change shown	Removal of most nurseries and glasshouses to the north of the site
1976	Small building added at centre of site	Most nurseries in area no longer shown, mostly replaced by housing developments
1983	No change shown	No major changes
1994	No change shown	No major changes
2011	No change shown	No major changes

4.2 The post war development history may also be traced from the planning history of the site. The significant applications are summarised in Table 4.2 below.

TABLE 4.2
A SUMMARY OF PLANNING APPLICATIONS FOR
27 PENHILL ROAD, LANCING

Ref. Nos.	Description	Decision
L/184/80/TP	Outline application for replacement of builders' storage building	Permitted 1980
L/149/80/TP	Erection of steel framed building for use as a part joinery workshop and builders' store and part light engineering	Refused 1980
L/76/90/TP	Conversion of a bungalow to two lock-up garages	Refused 1990
ADC/0219/09	Demolition of bungalow and redevelopment of site to provide 5 no. two-bedroom terraced houses, at rear and 1 no. one-bedroom flat and 1 no. two-bedroom flat in new two storey building at front	Refused 19/08/2009
ADC/0365/09	Demolition of bungalow (No. 27) and redevelopment including disused storage site (No. 29) with 4 three-bedroom terraced houses at rear and 1 three-bedroom detached house at front with 10 car parking spaces, storage for 12 bicycles and refuse/recycling storage	Permitted 23/02/2010
ADC/0468/10	Non-material amendment of ADC/0365/09 to increase height of proposed house at front (replacing No. 27 Penhill Road) to match No. 25, minor revisions to internal layout and fenestration, reduction of first floor front bedroom windows, and retention of existing parking bay at front	Permitted 06/01/2011



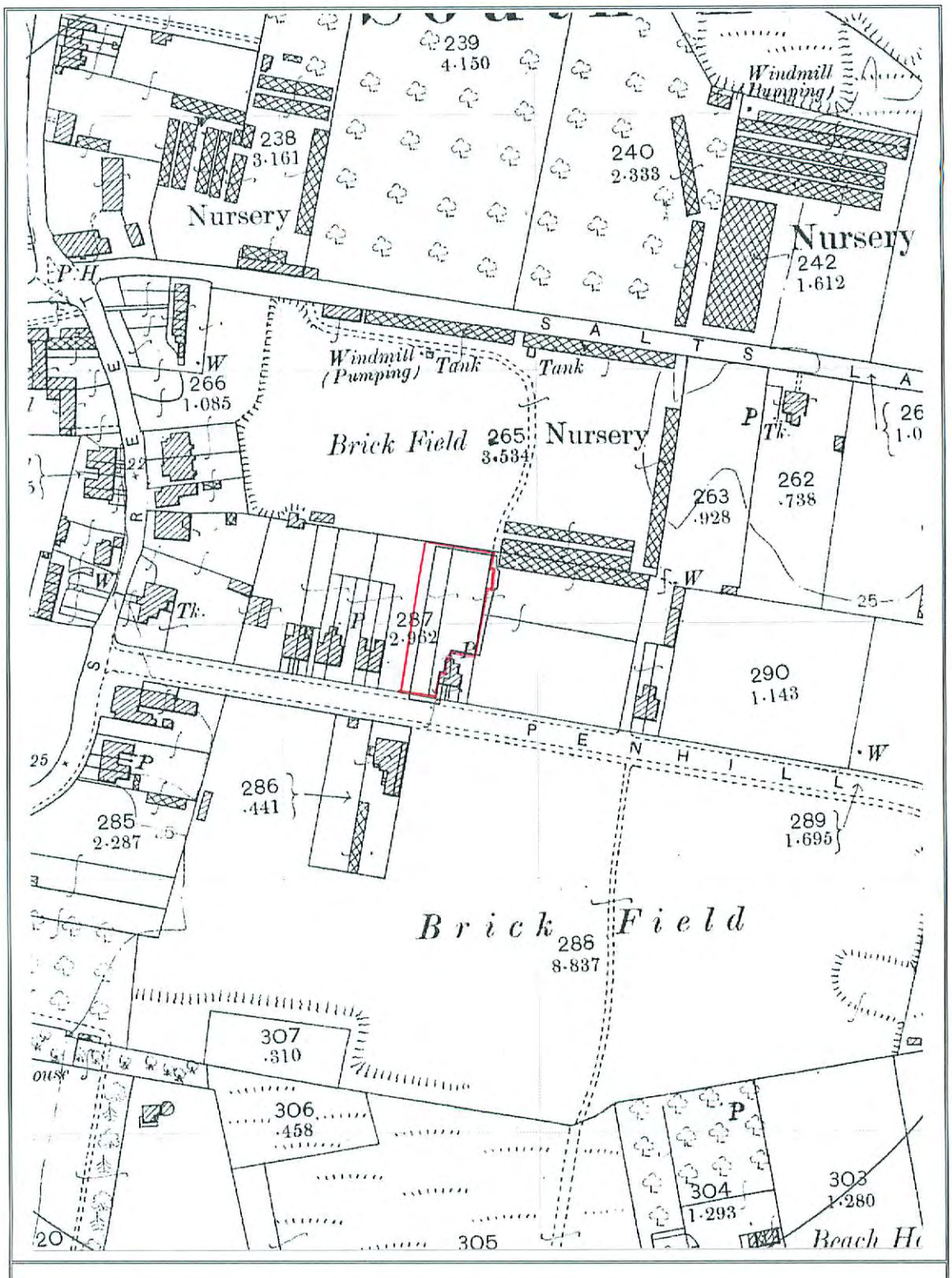
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Fig. 2 THE SITE AS SHOWN ON THE OS PLAN OF 1873

February 2011 Scale 1:2500



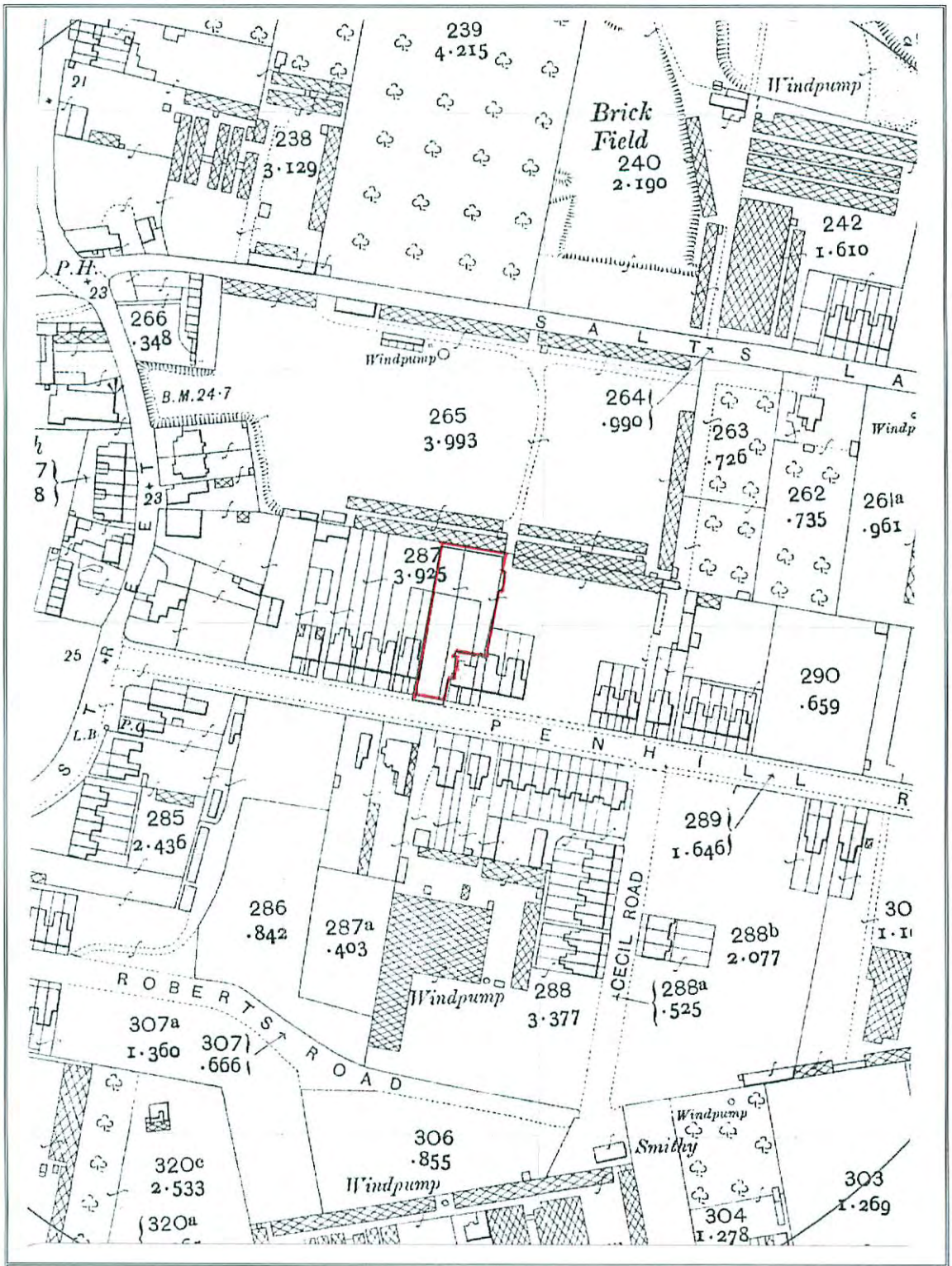
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Fig. 3 THE SITE AS SHOWN ON THE OS PLAN OF 1898

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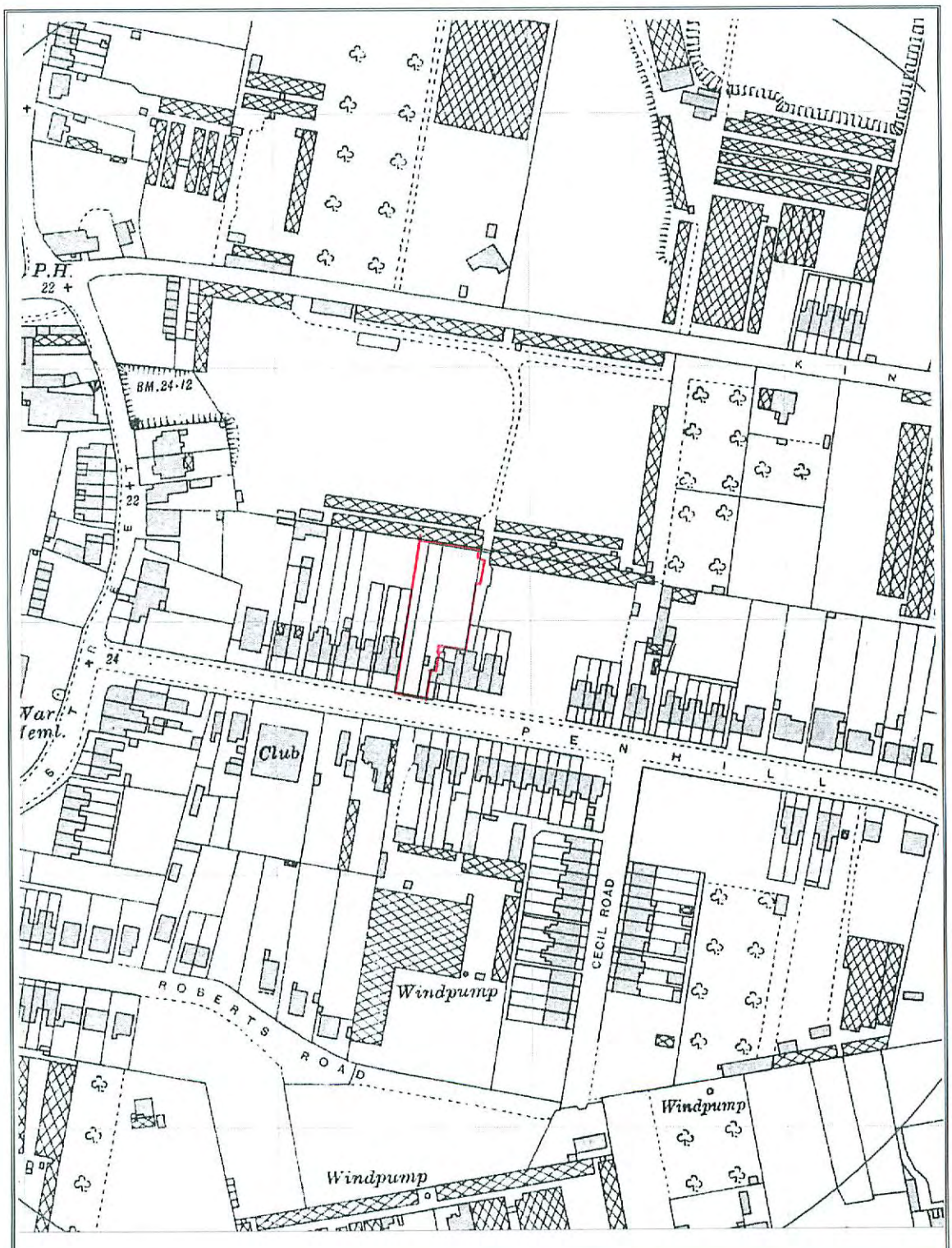
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Fig. 4 THE SITE AS SHOWN ON THE OS PLAN OF 1912

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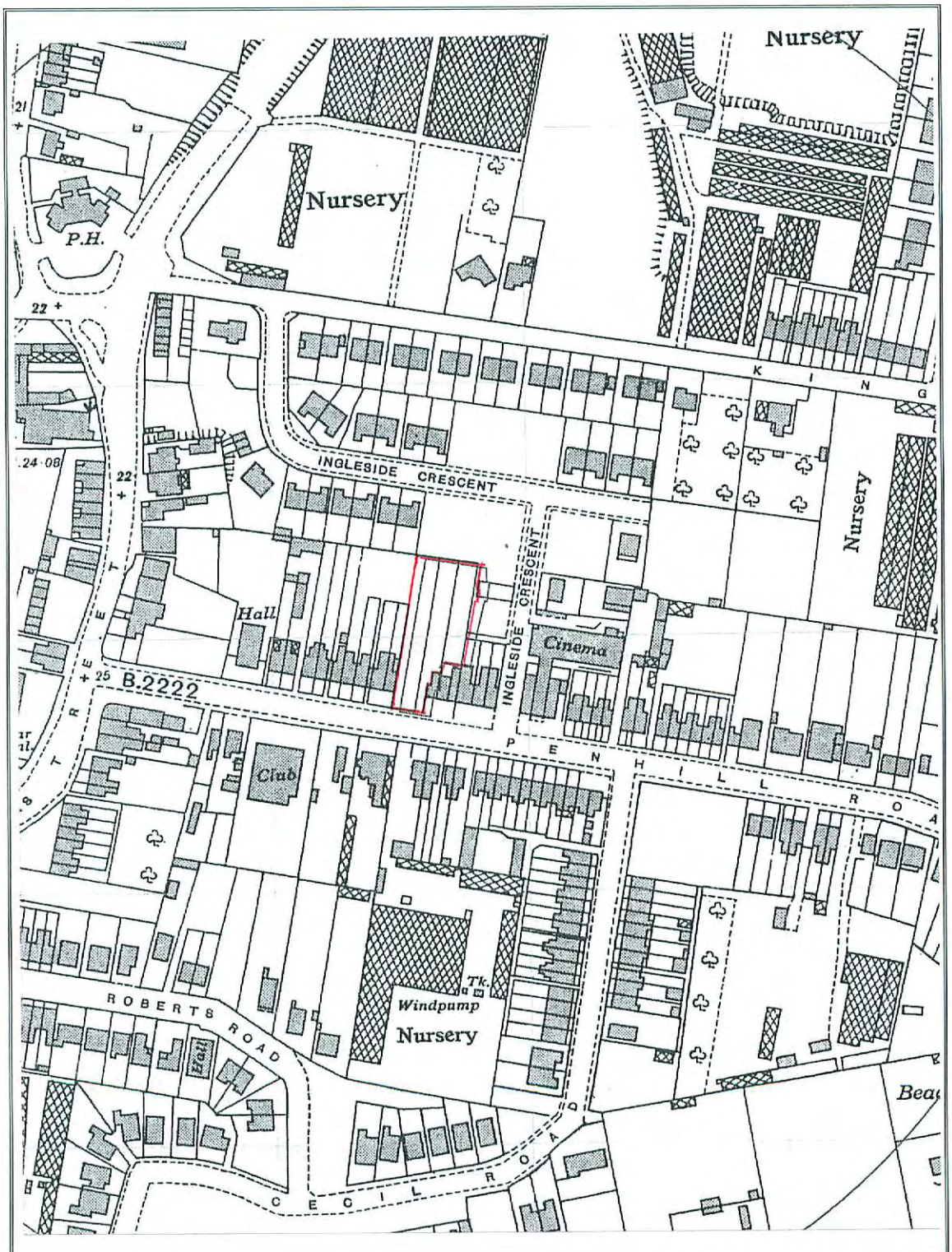
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Fig. 5 THE SITE AS SHOWN ON THE OS PLAN OF 1932

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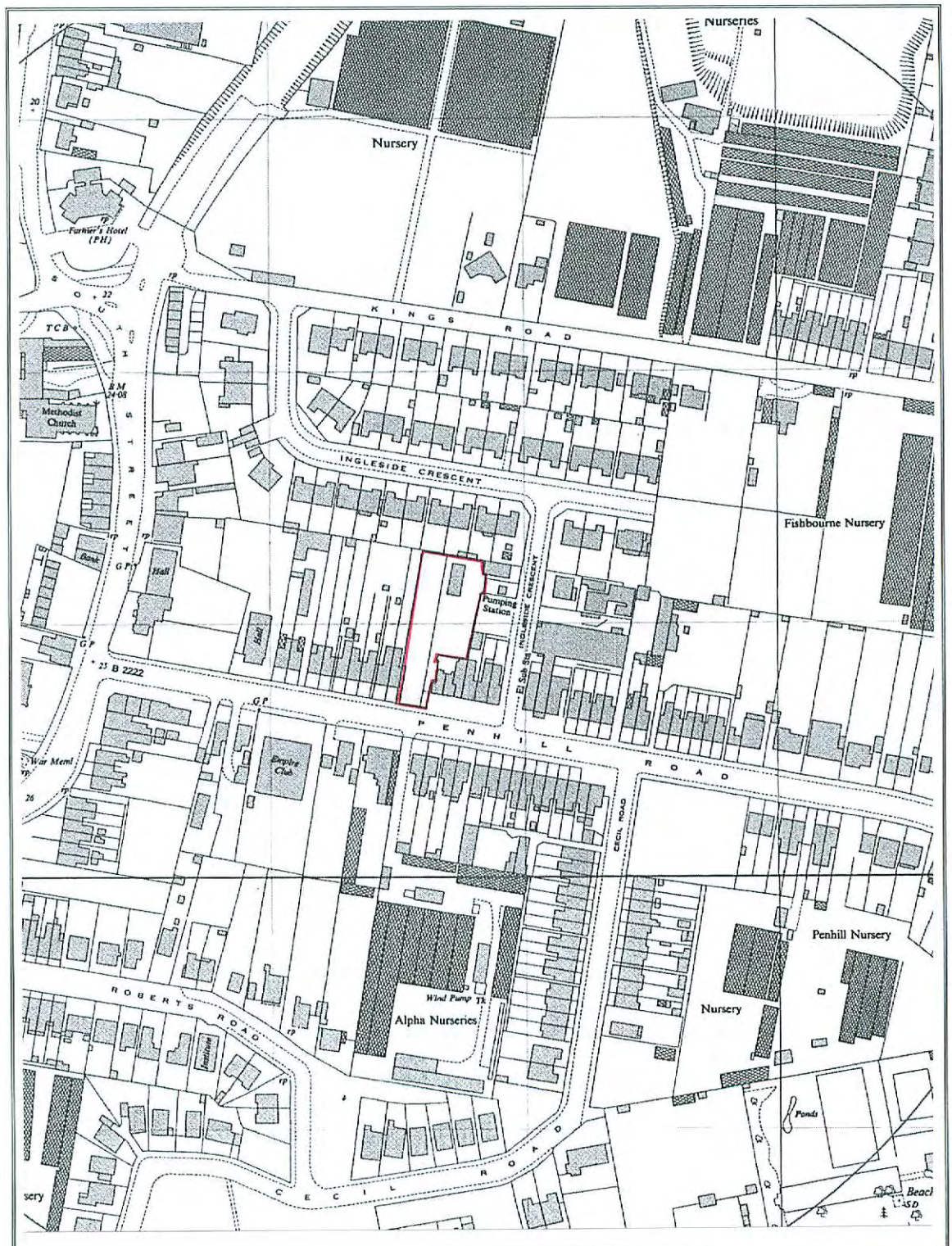
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Preliminary Contamination Risk Assessment

Fig. 6 THE SITE AS SHOWN ON THE OS PLAN OF 1943

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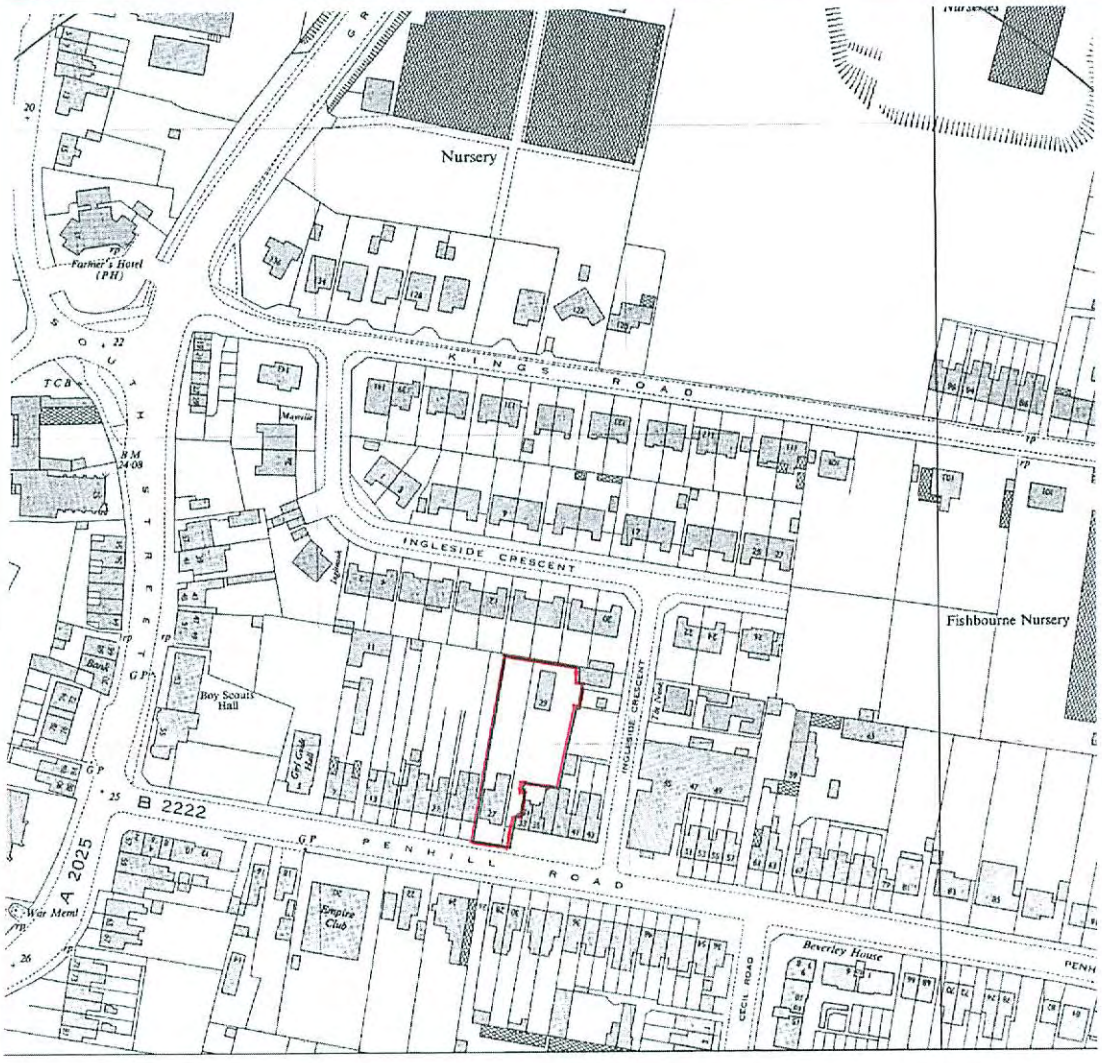
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Fig. 7 THE SITE AS SHOWN ON THE OS PLAN OF 1952

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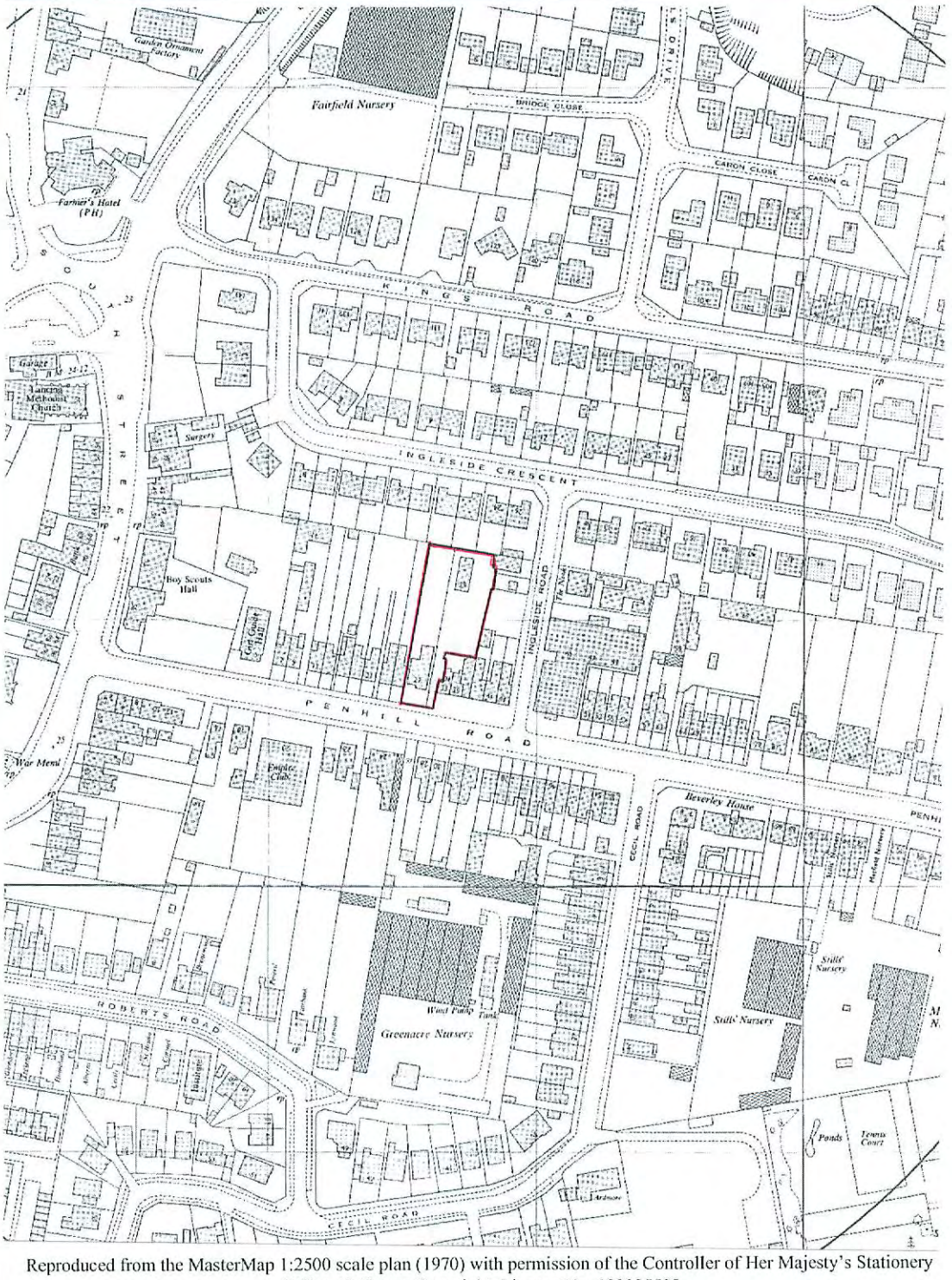
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Fig. 8 THE SITE AS SHOWN ON THE OS PLAN OF 1960

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Fig. 9 THE SITE AS SHOWN ON THE OS PLAN OF 1970

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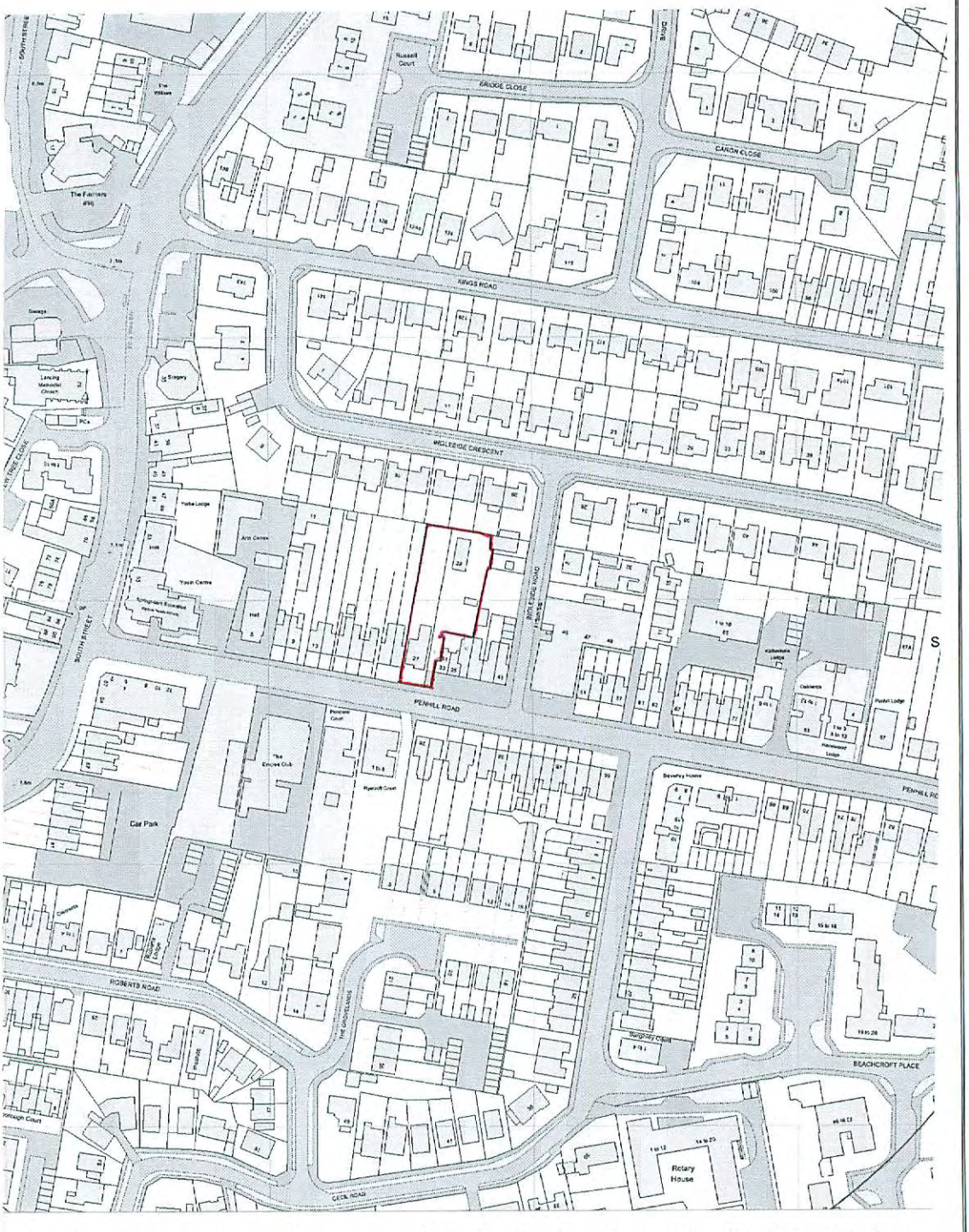
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Fig. 10 THE SITE AS SHOWN ON THE OS PLAN OF 1976

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Fig. 11 THE SITE AS SHOWN ON THE OS PLAN OF 2011

February 2011 Scale 1:2500

5. THE EXISTING SITE

5.1 The site was visited on 17 January 2011.

5.2 The site is partially redeveloped. The house at No. 27 has been demolished and the former storage sheds have disappeared.

5.3 Four houses in terrace have been constructed towards the rear of the site, with an open area for gardens between the houses and the northern site boundary wall. There is an apple tree in the northwestern corner. The foundations of a new building are visible at the front of the site. The area behind the foundations has been left as exposed soil for a proposed garden area. The remainder of the site (centre and east) remains under hard cover and is intended to remain this way, apart from some areas of built-up planting beds above the surfacing.

5.4 No significant sources of contamination were apparent within the site and there is no known history of oil tanks or similar storage at the site.

5.5 The former land uses were residential at the front (south) and west of the site plus commercial storage (builders' supplies) at the rear/east of the site. The materials formerly stored on site were described as timber, roofing materials, bricks, tiles, sand, bags of cement, etc.

5.6 The land use to the west and south of the site is residential (houses with gardens). On the east side, the adjacent building on Penhill Road is used as commercial offices (instrument calibrations) with a fish and chip shop plus bathroom showroom beyond. Land use on the east side is generally commercial with small workshops, storage sheds and an electricity substation.

5.7 Surrounding land uses include motor trade (Volvo dealer) a short distance to the east on the east side Ingleside Road, with associated car parking on the west side of the road.

5.8 See Appendix A for the proposed development layout.

6. POTENTIAL SOURCES OF CONTAMINATION

6.1 Land use history at the site has comprised being part of a brickfield until circa 1890, then remaining undeveloped land (possibly used for storage or a builder's yard) until the east side was developed for residential gardens circa 1935. The west side appears to have remained undeveloped until used as a house and garden (No. 27) after the late 1950s. The gardens on the east side of the site were subsequently redeveloped for No. 29 Penhill Road (believed to have been a builder's yard and subsequently storage for builders' materials).

6.2 There is some uncertainty as to whether the Brickearth at the site has been excavated. In any event, a C19th Brickearth excavation would probably have been quite shallow (the weathered material being preferred) and would probably have been re-graded rather than completely backfilled to the former ground level.

6.3 The risks attached to the former use for storing builders' materials on the eastern side of the site are uncertain. It is not known whether there was any significant storage of liquid potential contaminants.

6.4 None of the identified surrounding land uses appear likely to have had any significant contamination related impacts on the site.

6.5 No asbestos containing materials were observed at the site.

6.6 A GroundSure EnviroInsight report has also been prepared for the site (see Appendix B). This report provides records from the EA and other data holders regarding potential sources of contamination at the site and within the vicinity of the site. See sections 6.6.1 to 6.6.7 below for summary of significant contamination information, and Appendix B for full GroundSure report.

6.6.1 Environmental permits, incidents and registers

There are no industrial sites holding licences and/or authorisations and no EA recorded pollution incidents within close enough proximity to pose a significant contamination risk to the site. There are no dangerous or hazardous sites and no sites determined as contaminated land under Part IIA EPA 1990 within 500 m of the site.

6.6.2 Landfill and other waste sites

All landfill and other waste sites within the local area are over 500 m from the site, and are not thought to pose any landfill gas migration risk at the site.

6.6.3 Current land use

None of the records of potentially contaminative industrial sites within 250 m of the site are thought to pose significant contamination risk to the site. There are no petrol or fuel sites and no underground high pressure oil and gas pipelines within 500 m.

6.6.4 Hydrogeology and hydrology

The site lies on a Principal Aquifer (the Chalk) of high permeability. The site is not within 500 m of a Source Protection Zone and there are no water abstraction licences within 500 m of the site. There is no EA information on river quality within 1500 m of the study site, no detailed river network entries within 300 m and no surface water features within 250 m.

6.6.5 **Flood risk**

The site is not within 250 m of an EA indicative Zone 2 or 3 floodplain. There are no flood defences, no areas benefiting from flood defences and no areas used for flood storage within 250 m of the site. The highest susceptibility to groundwater flooding within 50 m is negligible.

6.6.6 **Designated environmentally sensitive sites**

There are no designated environmentally sensitive sites within 500 m of the site.

6.6.7 **Natural hazard findings and mining**

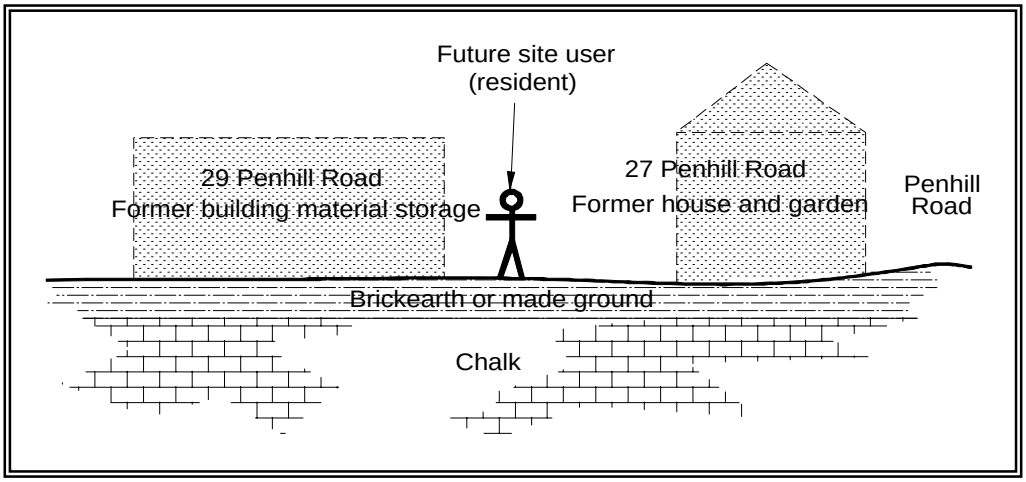
The maximum risk of natural ground subsidence and the risk of subsidence relating to shallow mining at the site are both classified as low. There are no coal mining areas or brine affected areas within 75 m of the site.

6.7 Adur & Worthing Councils' Environmental Health Department has confirmed that the site is not on any register of contaminated land. However, the site is within an area (former brickfield) identified as high priority for site investigation due to the uncertainty regarding the nature of any materials used to backfill the former workings. See Appendix C.

6.8 A radon assessment has also been undertaken for the site (see Appendix D). The site lies within a radon-affected area; between 1 and 3 % of properties are considered likely to be above the Action Level. No radon protective measures are required for new buildings.

6.9 For contamination to be considered significant, there must be three elements present: *contamination* (a significant concentration of a hazardous substance), a *receptor* (a person potentially at risk from the hazardous substance) and a feasible *pathway* between substance and receptor. See Figure 10 below:

FIGURE 10
CONCEPTUAL MODEL



6.10 The model may be applied to three cases:

i. Construction workers engaged in the redevelopment of the site and exposed to contamination. The receptor is assumed to be an adult.

ii. Future residents on the site after the redevelopment is complete and exposed to contact with soil in any garden or soft landscape area. The receptor is assumed to be a child.

iii. Post-redevelopment impacts on the wider environment. Includes off-site contamination migration, contamination of watercourses, etc.

6.11 Potential pollutant linkages between source, pathway and receptor for the site are shown in Table 6.1 below.

TABLE 6.1
POTENTIAL POLLUTANT LINKAGES FOR THE SITE

Source		**Pathway**	**Receptor**	**Risk**
Contaminated soil	**Contaminated groundwater**			
Some potential for contamination from uncertain historic use and storage of builders' materials	Impacts of groundwater limited by relatively low permeability of Brickearth	Contact with contaminated soil, groundwater or soil gas	Future site users	?
		Ingestion of or skin contact with contaminated soil, dust or groundwater	Maintenance or construction workers engaged in groundworks on the site	?
		Contact with contaminated soil or ground water	Building & services	?
		Leeching of site contaminants into groundwater	Wider environment	×

Key: ✓Significant risk × No significant risk ? Uncertain risk

6.12 The risk to future site users relates to contact with the existing soil in the proposed garden areas. Where these areas have formerly only been used as garden or have been under hard cover, the risks are though to be fairly low, but there is some uncertainty. Any planters placed over existing hard cover will be filled with clean topsoil and risks should be minimal.

6.13 The risk to maintenance and construction workers is uncertain (although thought to be low). However, any potential risk may be reduced by adopting appropriate industrial hygiene practices during work in excavations on site.

6.14 It may be necessary to check the condition of the soil on the route of any new polyethylene water main to ensure compliance with Water Regulations Advisory Scheme (WRAS) standards. The relatively low permeability of the underlying Brickearth should limit impacts on groundwater from any contamination in the upper soil.

7. CONCLUSIONS

7.1 The site lies on Brickearth over Newhaven Formation Upper/Middle Chalk. The Chalk is a principal aquifer, although the site is not within (or close to) a Groundwater Source Protection Zone. The site is only moderately hydrogeologically sensitive. The site was part of a brickfield and the Brickearth at the site may have been partially excavated. The extent of any backfilling of brickearth excavations at the site in uncertain. C19th brick excavations were generally quite shallow and, if excavated, the site would probably largely been re-graded to rather than completely backfilled to original ground level.

7.2 There are no active, closed or historic waste disposal landfills within 250 m of the site and no significant landfill gas migration risks are suspected.

7.3 The site is within Flood Zone 1 and is not considered at significant risk of flooding.

7.4 Adur & Worthing Councils' Environmental Health Department has confirmed that the site is not on any register of contaminated land. However, the site is within an area identified as high priority for site investigation due to the uncertainty regarding the nature of any materials used to backfill the former brickfield workings. Backfill could contain brick-making waste, ash and clinker from kilns, etc. See Appendix C.

7.5 Various land uses within some contamination potential have been identified within the vicinity, although none appear to be close enough to have adversely affected the site. See Appendices B and C.

7.6 The site lies within a lower-level radon-affected area, classified as 1 - 3 % of properties likely to be above the Action Level. No radon protective measures are required for new buildings. See Appendix D.

7.7 The site has been cleared of old buildings/building materials and no asbestos containing materials should be present within the site.

7.8 The western part of the site appears to have been a house and garden since development in the late 1950s and no significant contamination from this land use is suspected. The eastern part of the site appears to have been used as a builders' yard and subsequently for storage of building materials. As much of this area has been under hard cover, contamination risks (from accidental spillages, etc.) are probably quite low.

7.9 The significant exposure risk for new residential site users will be from contact with soil in the garden or soft landscaping areas. It appears likely that imported topsoil (obtained from an uncontaminated source) will be required to make up the garden area to the rear of the new house closest to Penhill Road and for the planting areas elsewhere on the site. However, it appears that the existing topsoil at the rear of the site is to be retained (although new turf may be laid on it). The condition of the existing upper soil at the rear of the site is uncertain.

7.10 The overall environmental risk at the site is given in Table 7.1 below. In this case, the probability of impact will be medium for a proposed residential use, but without major hydrogeological sensitivity. The contamination potential is thought to be low, but has some uncertainties relating to the former land uses.

TABLE 7.1
RISK ASSESSMENT MATRIX

PROBABILITY OF IMPACT	CONTAMINATION POTENTIAL		
	SEVERE	MODERATE OR UNCERTAIN	MINIMAL
High	4	3	2
Medium	3	2	1
Low	2	1	1

The overall environmental risk rating is 2. This may be reduced to 1 (low) following analysis of the soil in the proposed garden area, completion of any remediation indicated and the supply of documentation to confirm that any imported topsoil is from an uncontaminated source.

8. RECOMMENDATIONS

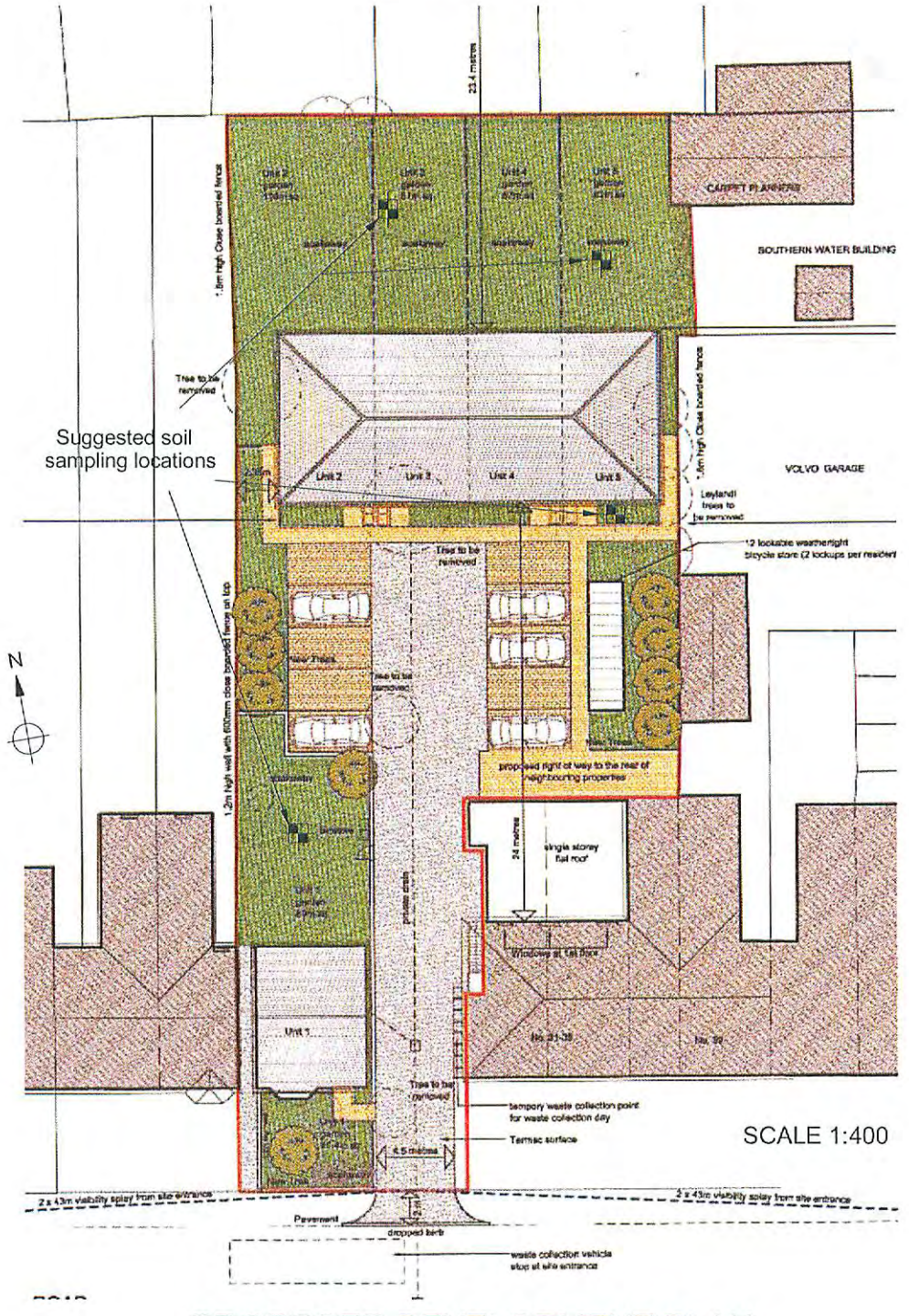
8.1 It is recommended that the upper soil/topsoil in the garden area to the rear of the site should be checked for evidence of contamination (by analysis of soil samples).

8.2 It is also recommended that any location where gardens or soft landscaping is proposed and where the existing soil will remain within the upper 0.6 m of finished planting area should also be checked for contamination (by analysis of soil samples). See proposed site layout and suggested soil sampling trial pit locations in Appendix A.

☆ ☆ ☆ ☆ ☆ ☆ ☆

APPENDIX A

APPENDIX A



PROPOSED DEVELOPMENT PLAN

(SHOWING PROPOSED SOIL SAMPLING LOCATIONS)

FROM JAMES BREKELL ARCHITECTS DRAWING No. 240 - 02 D OF JUNE 2009

APPENDIX B

GroundSure EnviroInsight

Address: 27,PENHILL ROAD,LANCING, BN15 8HA

Date: Jan 31, 2011

GroundSure Reference: HMD-47-013487

Your Reference: Chadwick/1/PenhillRd

Client: Environmental Assessment Services Ltd

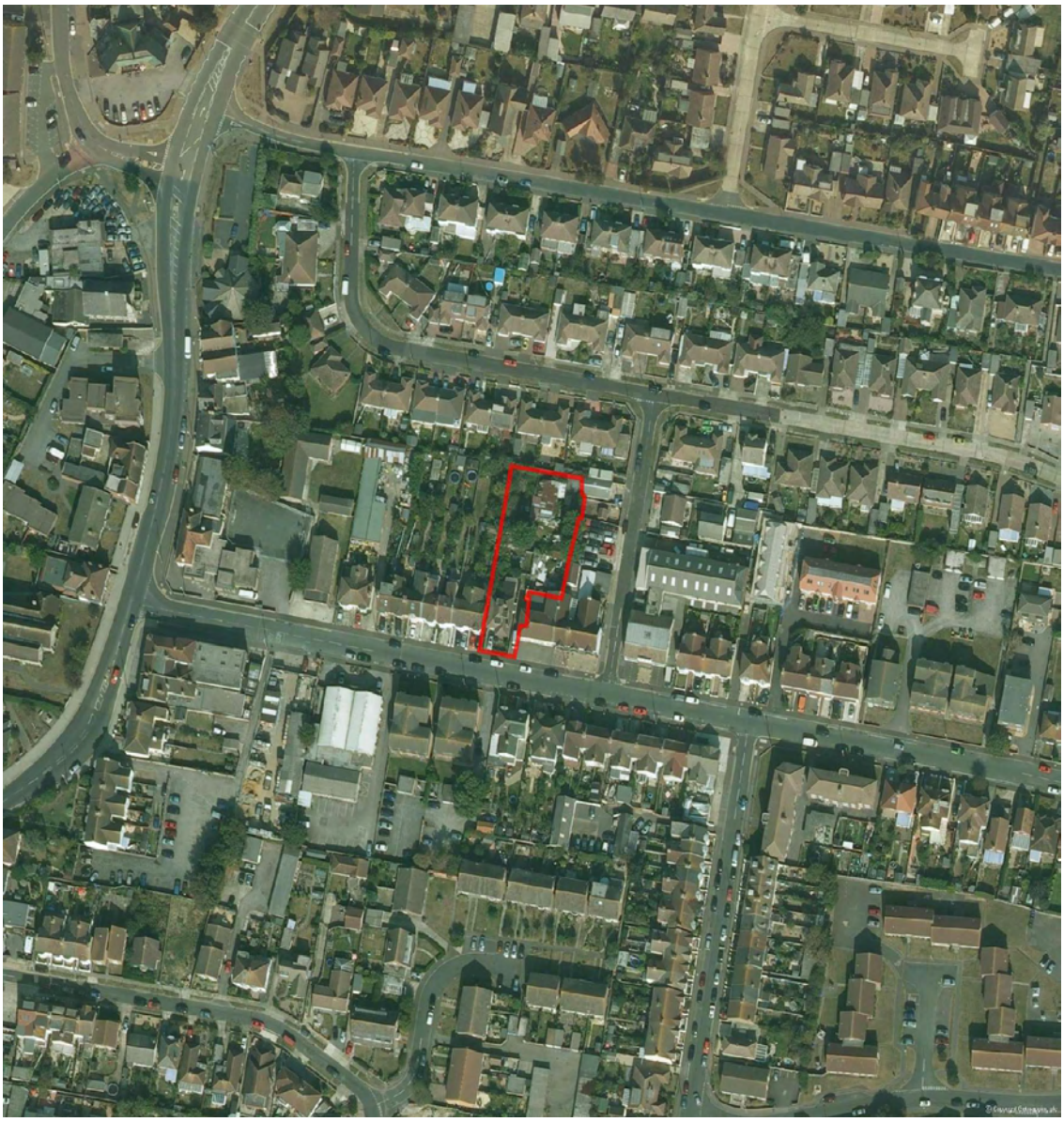


Brought to you by GroundSure

Aerial Photograph of Study Site

NW ▲ N NE

◄W E►



SW ▼ S SE

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

Site Name: 27,PENHILL ROAD,LANCING, BN15 8HA
Grid Reference: 518358,104081
Size of Site: 0.13 ha

Overview of Findings

For further details on each dataset, please refer to each individual section in the main 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.

Report Section	Number of records found within (X) m of the study site boundary					
1. Environmental Permits, Incidents and Registers	on-site	0-50	51-250	251-500	501-1000	1000-1500
1.1 Industrial Sites Holding Environmental Permits and/or Authorisations						
Records of historic IPC Authorisations	0	0	0	0	-	-
Records of Part A(1) and IPPC Authorised Activities	0	0	0	0	-	-
Records of Water Industry Referrals (potentially harmful discharges to the public sewer)	0	0	0	0	-	-
Records of Red List Discharge Consents (potentially harmful discharges to controlled waters)	0	0	0	0	-	-
Records of List 1 Dangerous Substances Inventory sites	0	0	0	0	-	-
Records of List 2 Dangerous Substances Inventory sites	0	0	0	0	-	-
Records of Part A(2) and Part B Activities and Enforcements	0	0	2	1	-	-
Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0	-	-
Records of Licensed Discharge Consents	0	0	0	0	-	-
Records of Planning Hazardous Substance Consents and Enforcements	0	0	0	0		
1.2 Records of COMAH and NIHHS sites	0	0	0	0	-	-
1.3 Environment Agency Recorded Pollution Incidents						
National Incidents Recording System, List 2	0	0	1	-	-	-
National Incidents Recording System, List 1	0	0	0	-	-	-
1.4 Sites Determined as Contaminated Land under Part IIA EPA 1990	0	0	0	0	-	-
2. Landfill and Other Waste Sites	on-site	0-50	51-250	251-500	501-1000	1000-1500
2.1 Landfill Sites						
Environment Agency Registered Landfill Sites	0	0	0	0	0	-
Landfill Data – Operational Landfill Sites	0	0	0	0	0	-
Environment Agency Historic Landfill Sites	0	0	0	1	0	2
Landfill Data – Non-Operational Landfill Sites	0	0	0	0	0	-
BGS/DoE Landfill Site Survey	0	0	0	0	0	0
GroundSure Local Authority Landfill Sites Data	0	0	0	0	0	4
2.2 Landfill and Other Waste Sites Findings						
Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	-	-
Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	-	-
Environment Agency Licensed Waste Sites	0	0	0	0	4	3

3. Current Land Uses	on-site	0-50	51-250	251-500	501-1000	1000-1500
3.1 Current Industrial Sites Data	0	2	9	-	-	-
3.2 Records of Petrol and Fuel Sites	0	0	0	0	-	-
3.3 Underground High Pressure Oil and Gas Pipelines	0	0	0	0	-	-

4. Geology	Description
4.1 Are there any records of Artificial Ground and Made Ground present beneath the study site? *	No
4.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site? *	Yes
4.3 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
Source: Scale: 1:50,000 BGS Sheet 318	

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

5. Hydrogeology and Hydrology	on-site	0-50	51-250	251-500	501-1000	1001-2000
5.1 Are there any records of Productive Strata in the Superficial Geology within 500m of the study site?				Yes		
5.2 Are there any records of Productive Strata in the Bedrock Geology within 500m of the study site?				Yes		
5.3 Groundwater Abstraction Licences (within 1000m of the study site).	0	0	0	0	1	-
5.4 Surface Water Abstraction Licences (within 1000m of the study site).	0	0	0	0	0	-
5.5 Potable Water Abstraction Licences (within 2000m of the study site).	0	0	0	0	0	0
5.6 Are there any Source Protection Zones within 500m of the study site?					No	

5.7 River Quality	on-site	0-50	51-250	251-500	501-1000	1001-1500
Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	No	No
5.8 Detailed River Network entries within 500m of the site	0	0	0	2	-	-
5.9 Surface water features within 250m of the study site	No	No	No	-	-	-

6. Flooding	
6.1 Are there any Environment Agency indicative Zone 2 floodplains within 250m of the study site?	No
6.2 Are there any Environment Agency indicative Zone 3 floodplains within 250m of the study site?	No
6.3 Are there any Flood Defences within 250m of the study site?	No
6.4 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
6.5 Are there any areas used for Flood Storage within 250m of the study site?	No
6.6 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Negligible
6.7 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	Moderately High

7. Designated Environmentally Sensitive Sites	on-site	0-50	51-250	251-500	501-1000	1001-1500
7.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	-	-
7.2 Records of National Nature Reserves (NNR)	0	0	0	0	-	-
7.3 Records of Local Nature Reserves (LNR)	0	0	0	0	-	-
7.4 Records of Special Areas of Conservation (SAC)	0	0	0	0	-	-
7.5 Records of Special Protection Areas (SPA)	0	0	0	0	-	-
7.6 Records of Ramsar sites	0	0	0	0	-	-
7.7 Records of World Heritage Sites	0	0	0	0	-	-
7.8 Records of Environmentally Sensitive Areas	0	0	0	0	-	-
7.9 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	-	-
7.10 Records of National Parks	0	0	0	0	-	-
7.11 Records of Nitrate Sensitive Areas	0	0	0	0	-	-
7.12 Records of Nitrate Vulnerable Zones	0	0	0	0	-	-

8. Natural Hazards

8.1 What is the maximum risk of natural ground subsidence?	Low

9. Mining

9.1 Are there any coal mining areas within 75m of the study site?	No
9.2 What is the risk of subsidence relating to shallow mining within 150m of the study site?	Low
9.3 Are there any brine affected areas within 75m of the study site?	No

Using this Report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between GroundSure and the Client. The document contains the following sections:

1. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

2. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

3. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure underground oil and gas pipelines.

4. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

5. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licenses, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

6. Flooding

Provides information on surface water flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

7. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites. These searches are conducted using radii of up to 500m.

8. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence.

9. Mining

Provides information on areas of coal and shallow mining.

10. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, GroundSure provide a free Technical Helpline (08444 159000) for further information and guidance.

Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

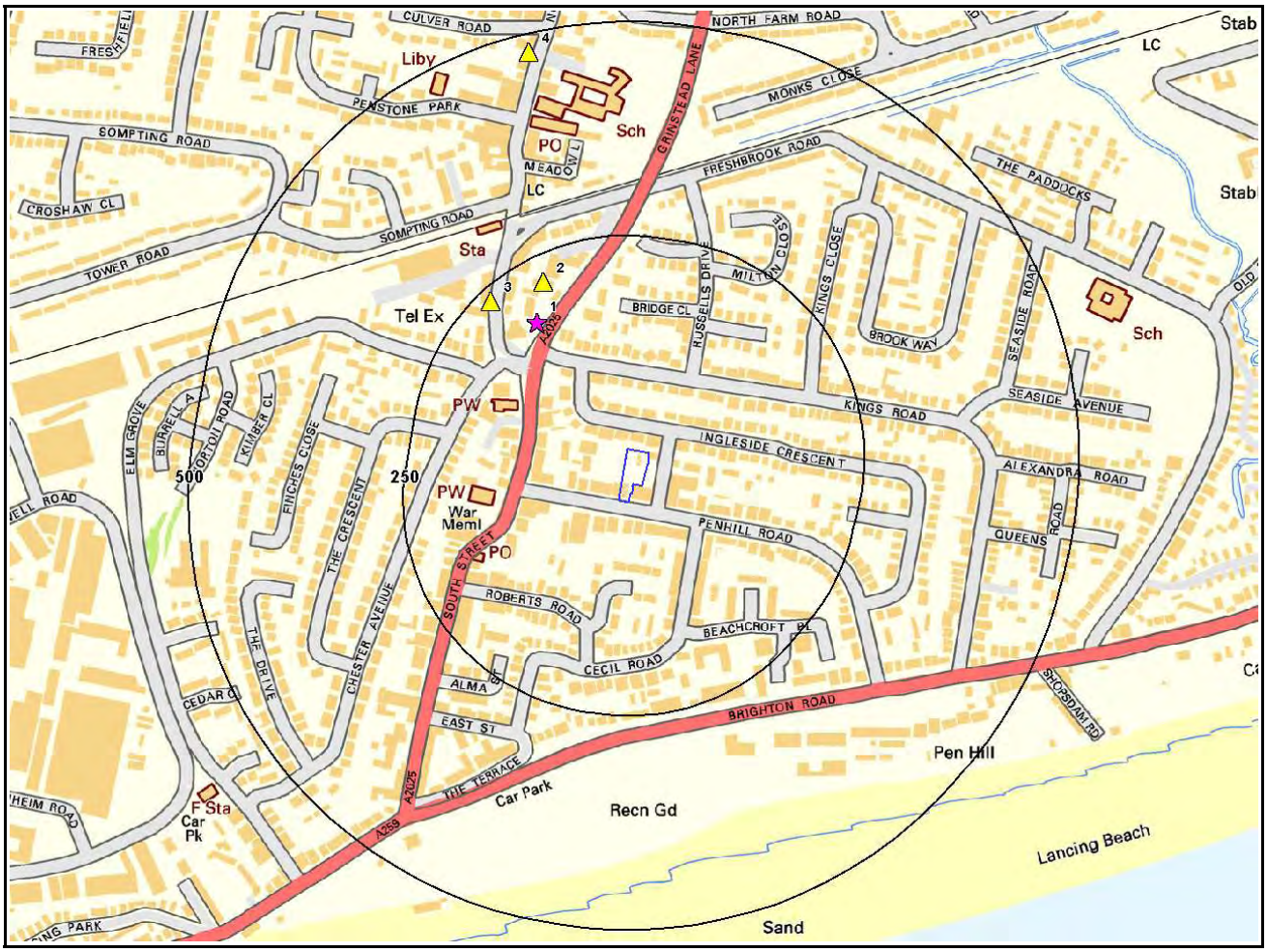
All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Environmental Permits, Incidents and Registers Map

NW ▲ N NE

◄W E►

SW ▼ S SE



Authorisations,Incidents and Registers Legend

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- Site Outline
- Search Buffers (m) — 250 — 500
- Recorded Pollution Incident
- Dangerous Substances (List 1)
- Dangerous Substances (List 2)
- Water Industry Referrals
- Licenced Discharge Consents
- Red List Discharge Consents
- RAS 3 & 4 Authorisations
- Part A(1) Authorised Processes and Historic IPC Authorisations
- Part A(2) and Part B Authorised Processes
- COMAH / NIHHS Sites
- Sites Determined as Contaminated Land
- Hazardous Substance Consents and Enforcements

1.Environmental Permits, Incidents and Registers

1.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

Records of historic IPC Authorisations within 500m of the study site: **0**

Database searched and no data found.

Records of Part A(1) and IPPC Authorised Activities within 500m of the study site: **0**

Database searched and no data found.

Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site: **0**

Database searched and no data found.

Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site: **0**

Database searched and no data found.

Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site: **0**

Database searched and no data found.

Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site: **0**

Database searched and no data found.

Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site: **3**

The following Part A(2) and Part B Activities are represented as points on the Authorisations, Incidents and Registers map:

ID	Distance	Direction	NGR	Details	
2	218.0	NW	518261, 104323	Address: Roberts Of Lancing, 1-3 South Street, Lancing Process: Status: Revoked Permit Type: Part B	Enforcement: Data requested, not received. Date of Enforcement: Data requested, not received. Comment: Data requested, not received.

3	234.0	NW	518200, 104300	Address: Roberts Of Lancing Ltd South St, Bn15 8ae Process: Cement/lime/mortar Process Status: Unknown Permit Type: Part B	Enforcement: Data requested, not received. Date of Enforcement: Data requested, not received. Comment: Data requested, not received.
4	476.0	N	518244, 104591	Address: Johnson Cleaners, 67 North Road, Lancing Process: Status: Current Permit Type: Part B	Enforcement: Data requested, not received. Date of Enforcement: Data requested, not received. Comment: Data requested, not received.

Records of Category 3 or 4 Radioactive Substance Licences within 500m of the study site: **0**

Database searched and no data found.

Records of Licensed Discharge Consents within 500m of the study site: **0**

Database searched and no data found.

Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site: **0**

Database searched and no data found.

1.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: **0**

Database searched and no data found.

1.3 Environment Agency Recorded Pollution Incidents

Records of National Incidents Recording System, List 2 within 250m of the study site: **1**

The following NIRS List 2 records are represented as points on the Authorisations, Incidents and Registers Map:

ID	Distance	Direction	NGR	Details	
1	182.0	NW	518254, 104277	Incident Date: 16/2/2002 Incident Identification: 58691 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

Records of National Incidents Recording System, List 1 within 250m of the study site: **0**

Database searched and no data found.

1.4 Sites Determined as Contaminated Land under Part IIA EPA 1990

How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site?	**0**

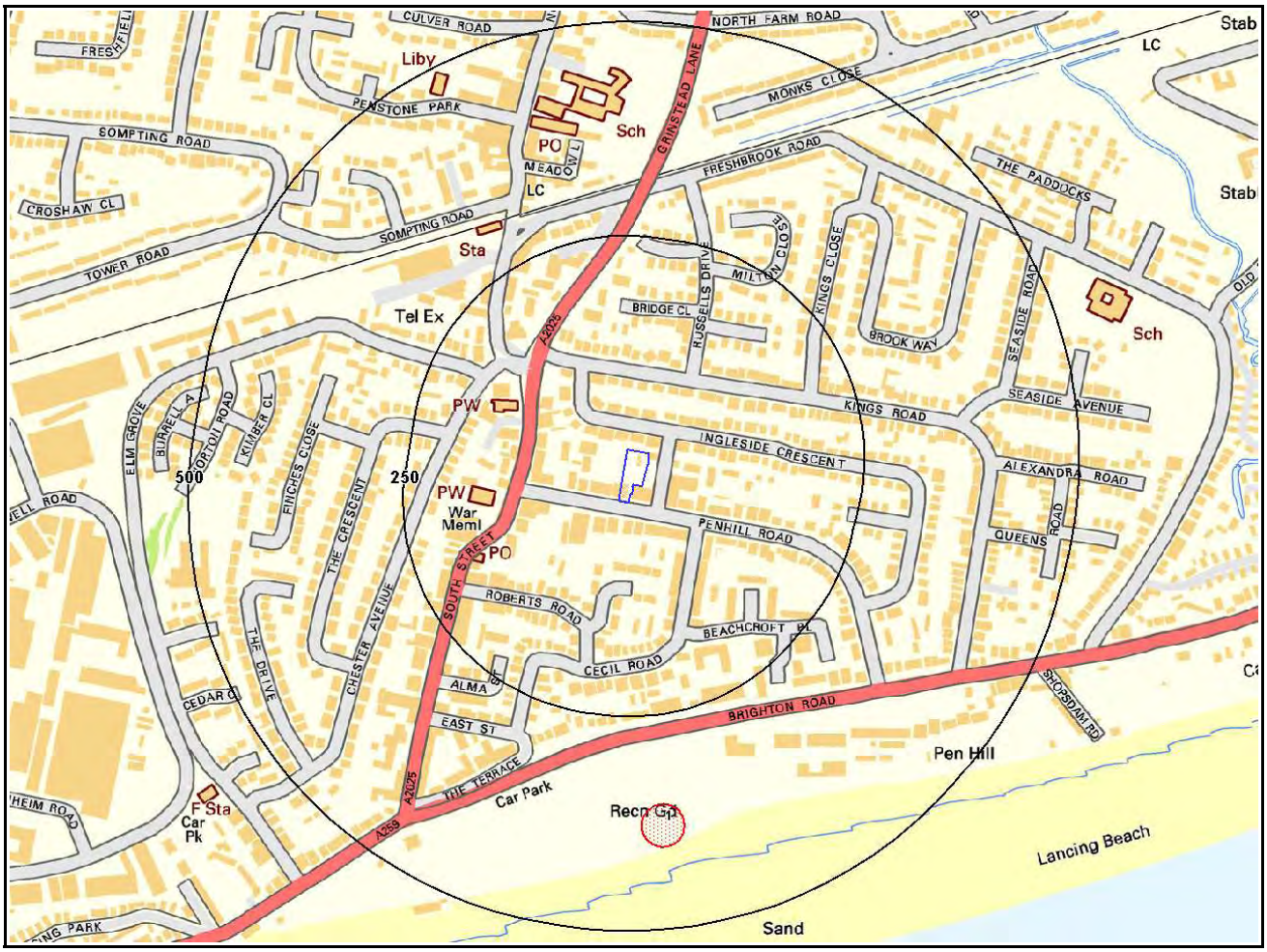
Database searched and no data found.

2. Landfill and Other Waste Sites Map

NW ▲ N NE

◄W E►

SW ▼ S SE



Landfill & Other Waste Sites Legend

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Site Outline

250
500
Search Buffers (m)

E.A. Active Landfill

E.A. Historic Landfill (Area Data)

E.A. Historic Landfill (Point Data)

BGS / DoE Survey Landfill

Local Authority Landfill (Area Data)

Local Authority Landfill (Point Data)

Operational Waste Treatment Licence

Closed Waste Treatment Licence

REGIS Waste Licence

Operational Landfill

Closed Landfill

2. Landfill and Other Waste Sites

2.1 Landfill Sites

Records from Environment Agency landfill data within 1000m of the study site: 0

Database searched and no data found.

Records of operational landfill sites sourced from Landmark within 1000m of the study site: 0

Database searched and no data found.

Records of Environment Agency historic landfill sites within 1500m of the study site: 3

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance	Direction	NGR	Details	
1	354.0	S	518400, 103600	Site Address: Beach Green, Lancing, Sussex Waste Licence: - Site Reference: WD27/318 Waste Type: Waste unknown Regis Reference: -	Licence Issue: Licence Surrendered: - Licence Hold Address: - Operator: -
Not shown	1108.0	SW	516900, 103500	Site Address: Brooklands, Brighton Road, Worthing, Sussex Waste Licence: Yes Site Reference: WD27/242, WD27/241 Waste Type: Inert, Industrial, Commercial, Household, Regis Reference: -	Licence Issue: 01-Jan-1976 Licence Surrendered: - Licence Hold Address: - Operator: -
Not shown	1405.0	W	516600, 103700	Site Address: Meadow Road, Worthing, Sussex Waste Licence: Yes Site Reference: 27-219, WD27/241 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge, Regis Reference: -	Licence Issue: 01-Jan-1976 Licence Surrendered: 14/05/1987 Licence Hold Address: - Operator: -

Records of non-operational landfill sites sourced from Landmark within 1000m of the study site: 0

Database searched and no data found.

Records of BGS/DoE non-operational landfill sites within 1500m of the study site: 0

Database searched and no data found.

Records of Local Authority landfill sites within 1500m of the study site: 4

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance	Direction	Site Address	Source	Data Type
Not shown	1402.0	W	Refuse Tip	1963 mapping	Polygon
Not shown	1402.0	W	Refuse Tip	1963 mapping	Polygon
Not shown	1411.0	W	Refuse Tip	1963 mapping	Polygon
Not shown	1412.0	W	Refuse Tip	1970 mapping	Polygon

2.2 Other Waste Sites

Records of operational waste treatment, transfer or disposal sites within 500m of the study site: 0

Database searched and no data found.

Records of non-operational waste treatment, transfer or disposal sites within 500m of the study site: 0

Database searched and no data found.

Records of Environment Agency licensed waste sites within 1500m of the study site: 7

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance	Direction	NGR	Details	
Not shown	752.0	W	517600, 104000	Site Address: Unit 17, Chartwell Road, Lancing, West Sussex, BN15 8TX Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Regis Licence Number: VIR031 EPR reference: EA/EPR/WP3795HR/A001 Operator: Viridor Waste Management Ltd Waste Management licence No: 10155 Annual Tonnage: 118500.0	Issue Date: 2/28/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Lancing Waste Transfer Station Correspondence Address: -, Churchill House, Churchill Way, Cardiff, Glamorgan, CF10 2HH
Not shown	752.0	W	517600, 104000	Site Address: Unit 17, Chartwell Road, Lancing, BN15 8TX Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Regis Licence Number: VIR031 EPR reference: - Operator: Viridor Waste Management Limited Waste Management licence No: 10155 Annual Tonnage: 118500.0	Issue Date: 28/02/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Lancing Waste Transfer Station Correspondence Address: -, Churchill House, Churchill Way, Cardiff, CF10 2HH
Not shown	866.0	W	517500, 103900	Site Address: Pcr, Chartwell Road, Lancing Business Park, Lancing, West Sussex, BN15 8TU Type: ELV Facility Size: < 25000 tonnes Regis Licence Number: MRR001 EPR reference: - Operator: Mr R Mansfield & Mr R Strohacker Waste Management licence No: 10136 Annual Tonnage: 0.0	Issue Date: 05/06/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Pcr (Peugeot & Citreon Recycling) Correspondence Address: -, Pcr (Peugeot & Citreon Recycling), Chartwell Road, Lancing Business Park, Lancing, West Sussex, BN15 8TU
Not shown	866.0	W	517490, 103960	Site Address: Unit 2, Chartwell Road, Churchill Ind. Estate, Worthing, West Sussex, BN15 8TU Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Regis Licence Number: SUS002 EPR reference: - Operator: Sussex Waste Recycling Limited Waste Management licence No: 10115 Annual Tonnage: 350000.0	Issue Date: 06/11/2000 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Sussex Waste Recycling Limited Correspondence Address: -, Unit 2, Chartwell Road, Churchill Ind. Estate, Worthing, West Sussex, BN15 8TU

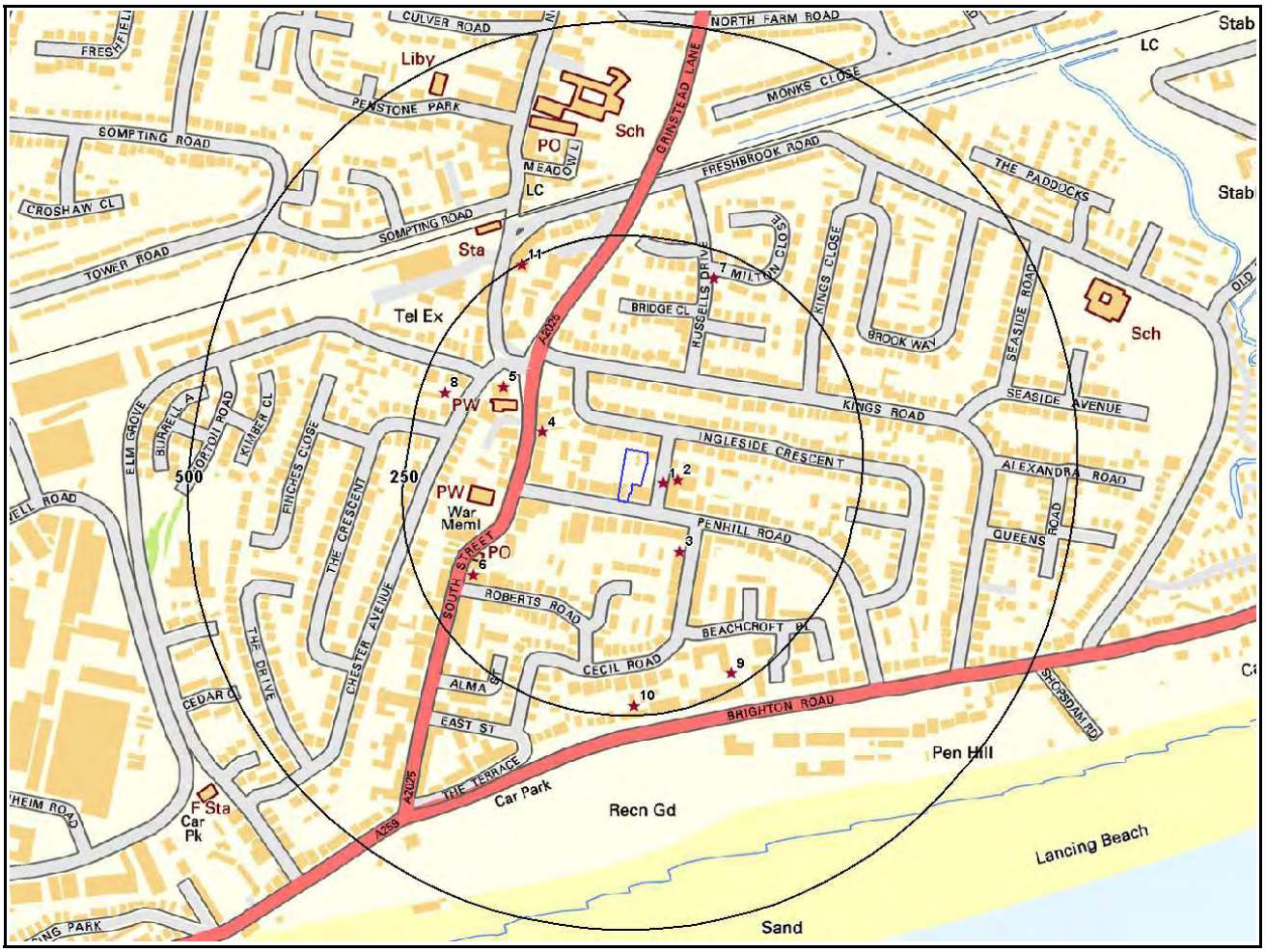
Not shown	1049.0	W	517300, 104100	Site Address: Commerce Way, Lancing, West Sussex, BN15 8TA Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Regis Licence Number: ADU001 EPR reference: - Operator: Adur District Council Waste Management licence No: 19657 Annual Tonnage: 0.0	Issue Date: 28/02/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Direct Services Unit Correspondence Address: -, Civic Centre, Ham Road, Shoreham By Sea, West Sussex, BN43 6PR
Not shown	1051.0	W	517300, 104000	Site Address: Rabbits Transport, Chartwell Road, Churchill Ind. Estate, Lancing, West Sussex, BN15 8TU Type: Household, Commercial & Industrial Waste T Stn Size: Unknown Regis Licence Number: SUS001 EPR reference: - Operator: Sussex Waste Recycling Ltd Waste Management licence No: 19675 Annual Tonnage: 0.0	Issue Date: 30/09/1996 Effective Date: - Modified: 24/01/2001 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Rabbits Transport Correspondence Address: -, Sussex Waste Recyling Limited, 2, Ham Farm Cottages, Littlehampton Road, Worthing, West Sussex, BN12 6PA
Not shown	1051.0	W	517300, 104000	Site Address: Rabbits Transport, Chartwell Road, Churchill Ind. Estate, Lancing, West Sussex, BN15 8TU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Regis Licence Number: SUS001 EPR reference: - Operator: Sussex Waste Recycling Ltd Waste Management licence No: 19675 Annual Tonnage: 0.0	Issue Date: 30/09/1996 Effective Date: - Modified: 24/01/2001 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Rabbits Transport Correspondence Address: -, Sussex Waste Recyling Limited, 2, Ham Farm Cottages, Littlehampton Road, Worthing, West Sussex, BN12 6PA

3. Current Land Use Map

NW N NE

◄W E►

SW S SE



Current Land Use Legend

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Site Outline

250
500
Search Buffers (m)

Current Industrial Sites

Petrol & Fuel Sites

Underground High Pressure Oil & Fuel Pipelines

3. Current Land Uses

3.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: **11**

The following records are represented as points on the Current Land Uses map.

ID	Distance	Direction	Company	Address	Activity	Category
1	24.0	E	Electricity Sub Station	BN15	Electrical Features	Infrastructure and Facilities
2	39.0	E	Ingleside Garage	Ingleside Road, Lancing, BN15 8EL	Vehicle Breakers	Recycling Services
3	83.0	SE	Lancing Car Sales	1, Cecil Road, Lancing, BN15 8HN	Secondhand Vehicles	Motoring
4	100.0	W	G S Gill Pharmacy	45, South Street, Lancing, BN15 8AN	Chemists and Pharmacies	Health Practitioners and Establishments
5	162.0	NW	Circle Garage	50, South Street, Lancing, BN15 8AJ	Vehicle Repair, Testing and Servicing	Repair and Servicing
6	189.0	SW	Embroidery Workshop	91a, South Street, Lancing, BN15 8AP	Textiles, Fabrics, Silk and Machinery	Industrial Products
7	218.0	N	Electricity Sub Station	BN15	Electrical Features	Infrastructure and Facilities
8	222.0	W	Electricity Sub Station	BN15	Electrical Features	Infrastructure and Facilities
9	233.0	SE	Electricity Sub Station	BN15	Electrical Features	Infrastructure and Facilities
10	238.0	S	Electricity Sub Station	BN15	Electrical Features	Infrastructure and Facilities
11	248.0	NW	Guardian Mobility Ltd	10 Station Parade, South Street, Lancing, BN15 8AA	Disability and Mobility Equipment	Consumer Products

3.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: **0**

Database searched and no data found.

3.3 Underground High Pressure Oil and Gas Pipelines

Records of high pressure underground pipelines within 500m of the study site: **0**

Database searched and no data found.

4. Geology

4.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

4.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
BRK-SSCL	BRICKEARTH	SAND, SILT AND CLAY

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

4.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

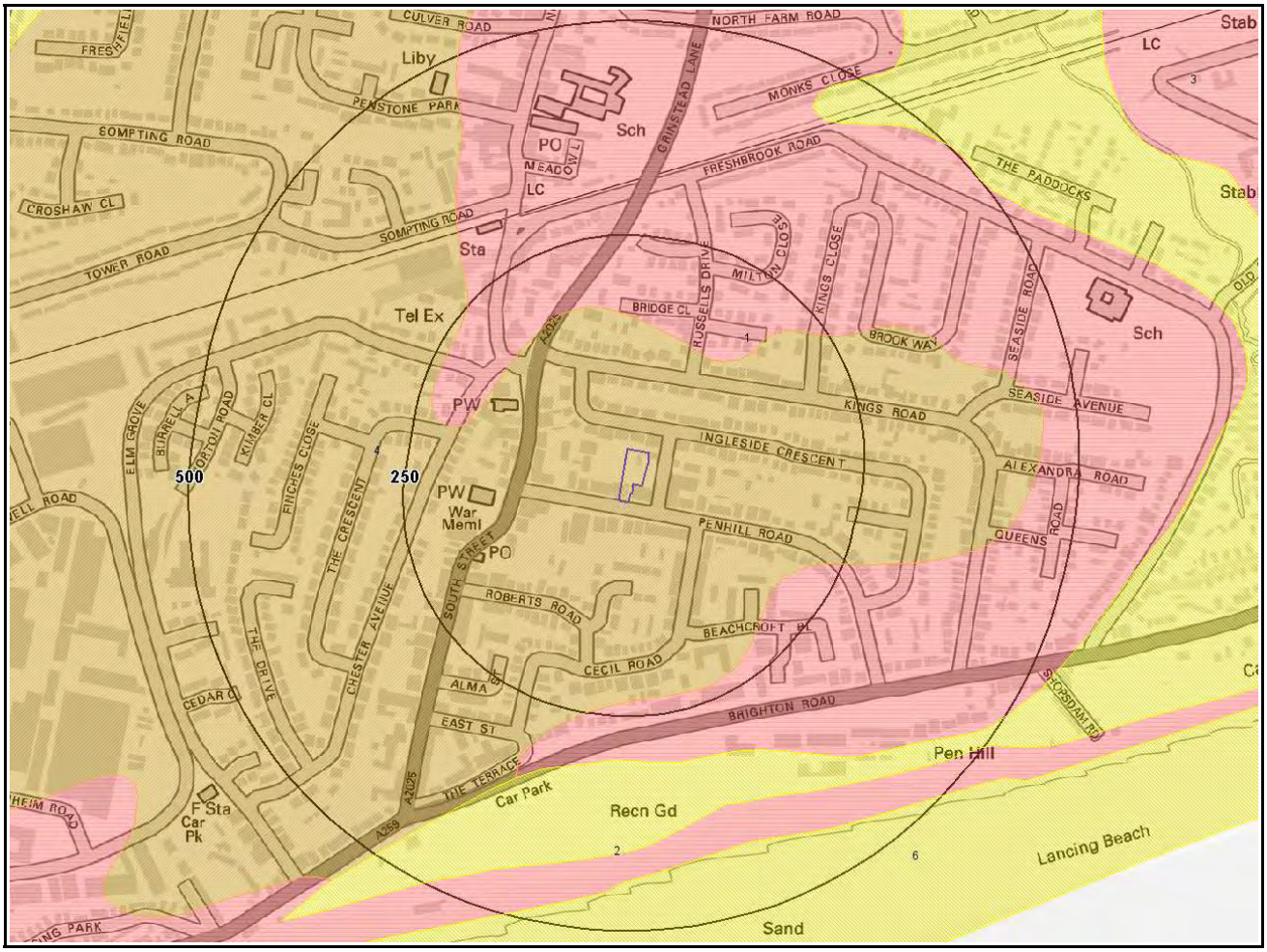
LEX Code	Description	Rock Type
NCK-CHLK	NEWHAVEN CHALK FORMATION	CHALK

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

For more detailed geological and ground stability data please refer to the "GroundSure GeoInsight". Available from our website.

5a. Hydrogeology - Aquifer Within Superficial Geology

NW N NE



W E

SW S SE

Aquifer Within Superficial Geology Legend

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Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

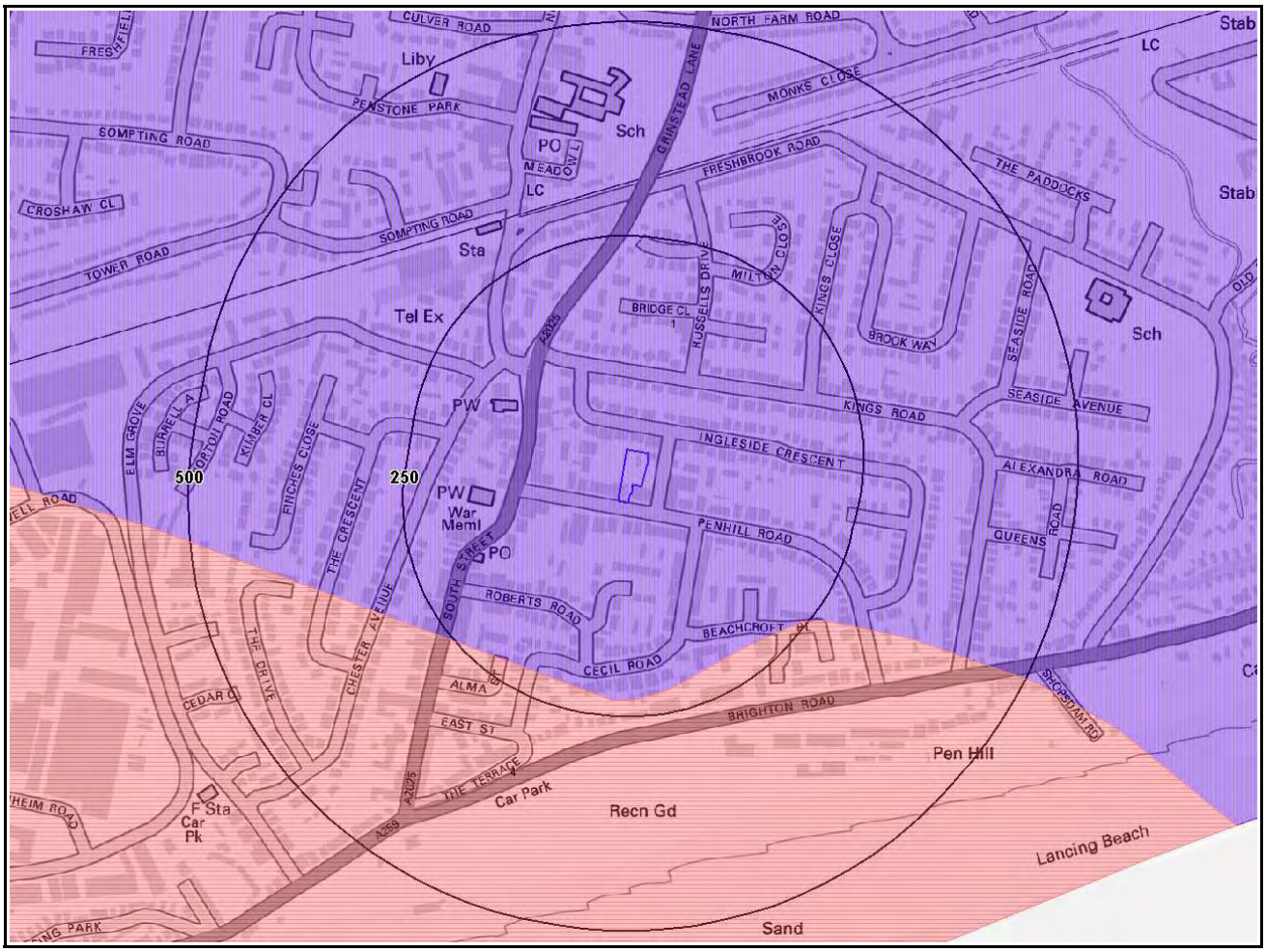
Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

5b. Hydrogeology - Aquifer Within Bedrock Geology and Abstraction Licenses

NW N NE



W E

SW S SE

Aquifer Within Bedrock Geology Legend

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Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

Secondary Aquifer - Undifferentiated Layers

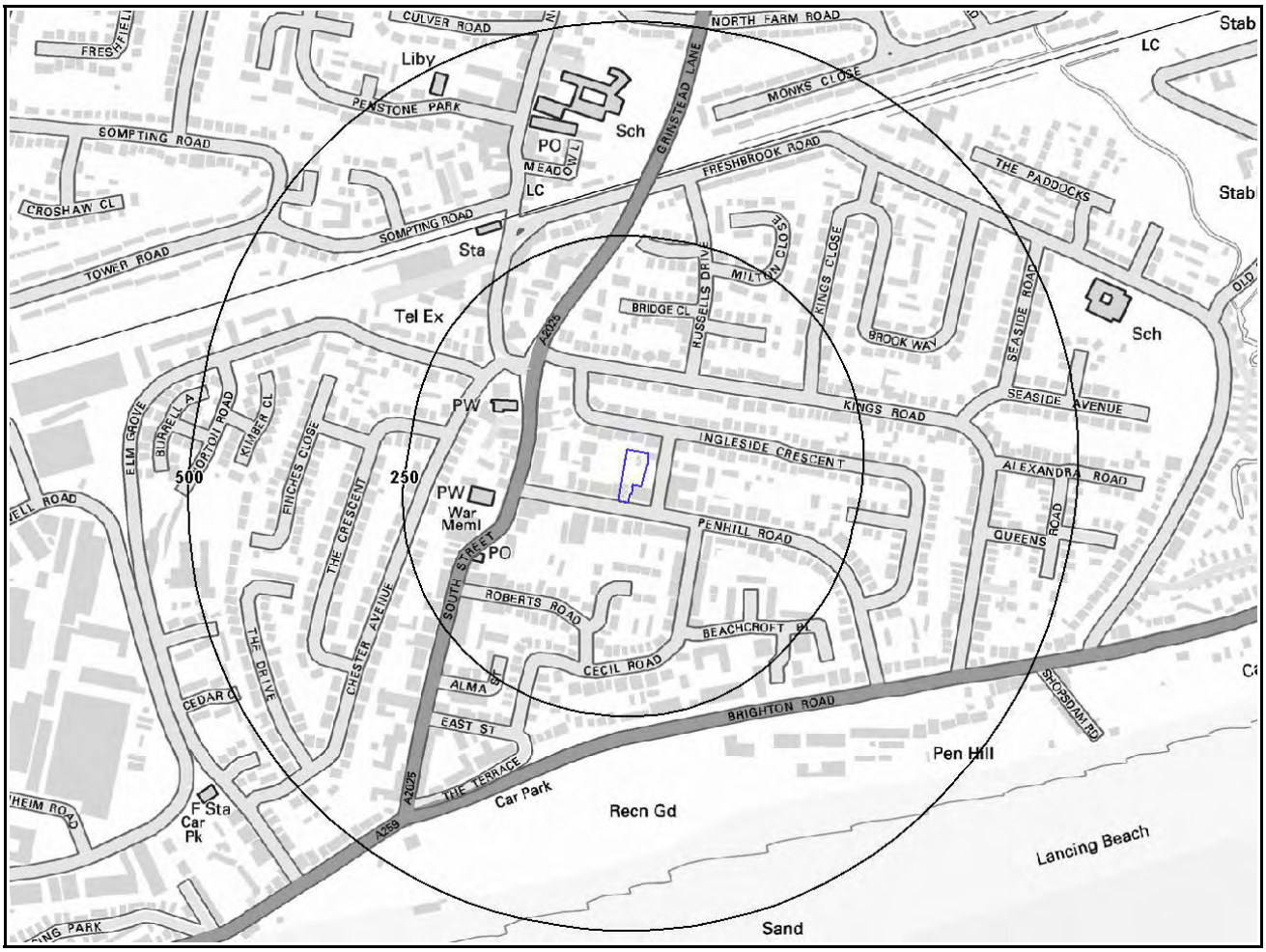
Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

5c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses

NW N NE



W E

SW S SE

SPZ and Potable Water Abstraction Licenses
Legend

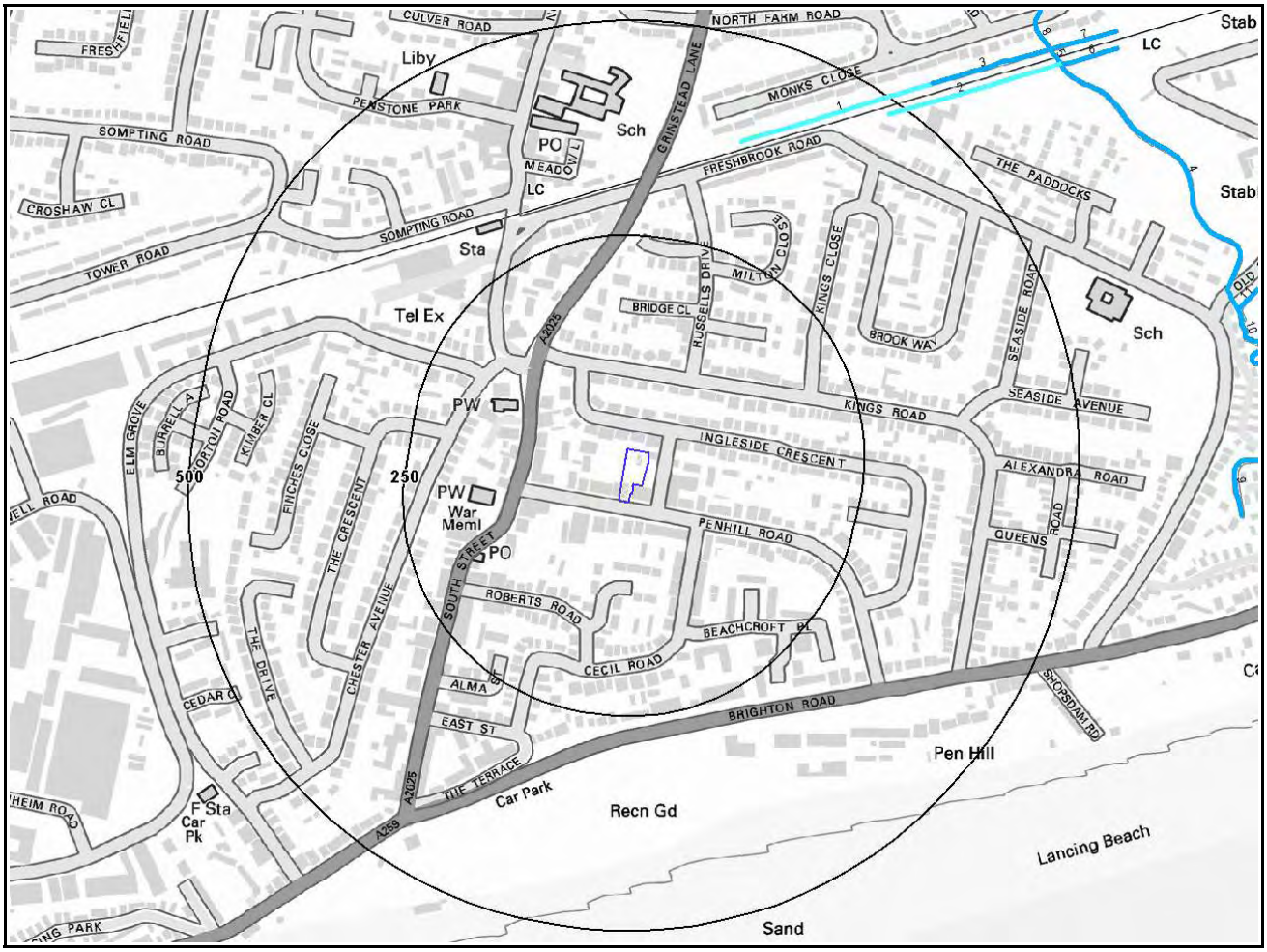
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- Site Outline
- 250 / 500 — Search Buffers (m)
- Source Protection Zone 1 - Inner Catchment
- Source Protection Zone 2 - Outer Catchment
- Source Protection Zone 3 - Total Catchment
- Source Protection Zone 4 - Zone of Special Interest
- Potable Water Abstraction Licence

5d. Hydrology – Detailed River Network and River Quality

NW N NE



W E

SW S SE

Hydrology Legend

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Site Outline

250
500
Search Buffers (m)

Primary River
Secondary River
Tertiary River
Lake/Reservoir
Underground River (inferred)
General Quality Assessment: Chemistry

Canal
Canal Tunnel
Extended Culvert (greater than 50m)
D/S of High Water Mark
D/S seaward extension
General Quality Assessment: Biology

5.Hydrogeology and Hydrology

5.1 Aquifer within Superficial Deposits

Are there records of productive strata within the superficial geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the GroundSure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (5a):

ID	Distance [m]	Direction	Designation	Description
4	0.0	On Site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
1	130.0	NE	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	301.0	S	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	369.0	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
6	421.0	S	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

5.2 Aquifer within Bedrock Deposits

Are there records of productive strata within the bedrock geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the GroundSure Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (5b):

ID	Distance [m]	Direction	Designation	Description
1	0.0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
4	213.0	SE	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

5.3 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 1000m of the study site? **Yes**

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (5b):

ID	Distance	Direction	NGR	Details	
Not shown	984.0	NE	519240, 104610	Licence No: 10/41/311101 Details: Animal Watering & General Use In Non Farming Situations Direct Source: Southern Region Groundwater Point: Old Salts Nursery Lancing Data Type: Point	Annual Volume (m³): 1591.1 Max Daily Volume (m³): 136.4 Original Application No: NPS/WR/003894 Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 14/7/2010 Version End Date:

5.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 1000m of the study site? **No**

Database searched and no data found.

5.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site? **No**

Database searched and no data found.

5.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site? **No**

Database searched and no data found.

5.7 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site? **No**

Biological Quality:

Database searched and no data found.

Chemical Quality:

Database searched and no data found.

5.8 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site? **Yes**

The following Detailed River Network records are represented on the Hydrology Map (5d):

ID	Distance	Direction		Details
1	378.0	N	River Name: Drain Water Course Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Catchment: - Drain: YES Main River Status: Currently Undefined
2	482.0	NE	River Name: Drain Water Course Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Catchment: - Drain: YES Main River Status: Currently Undefined

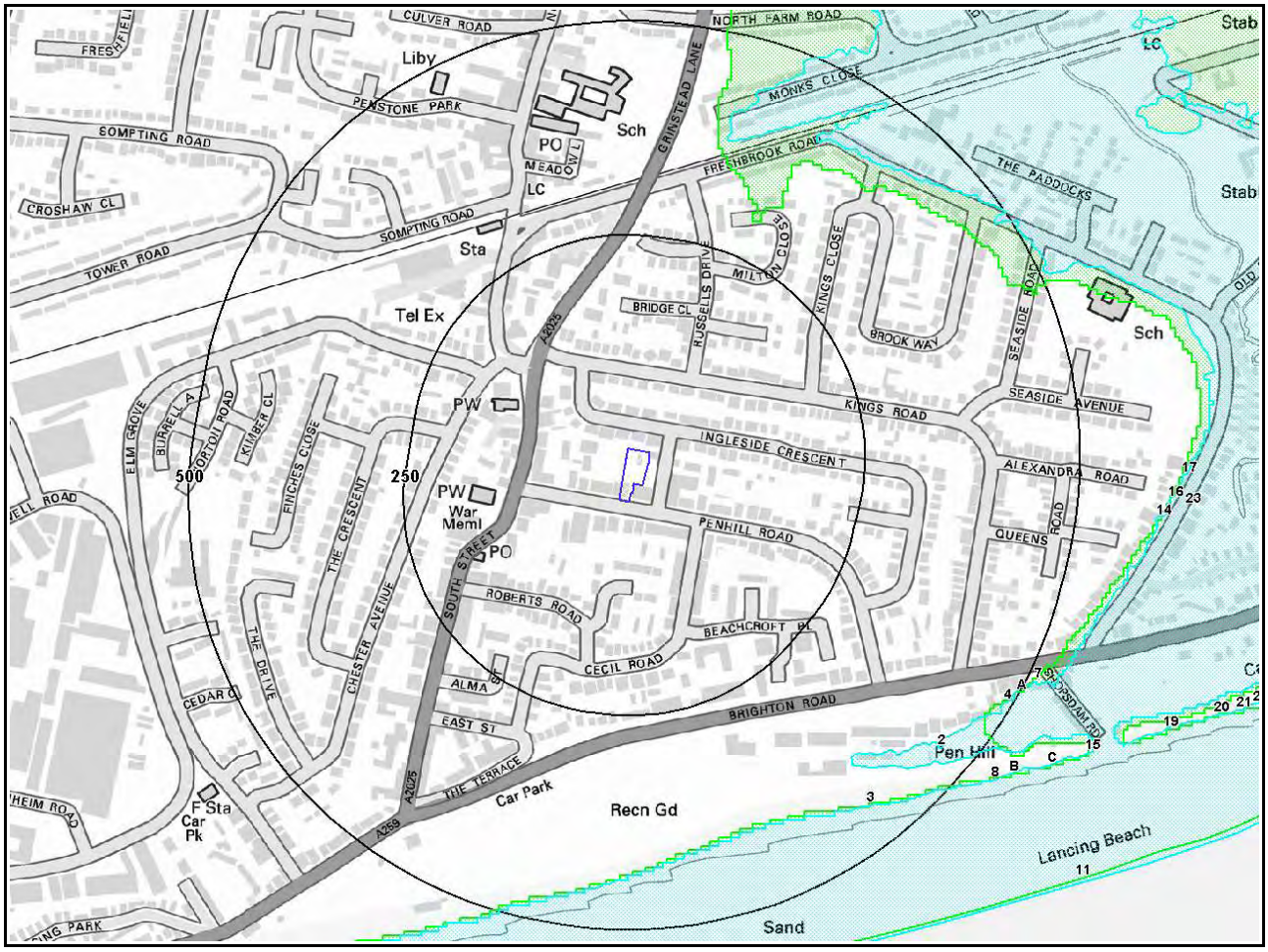
5.9 Surface Water Features

Are there any surface water features within 250m of the study site? **No**

Database searched and no data found.

6. Environment Agency Flood Map

NW ▲ N NE



◄W E►

SW S ▼ SE

Environment Agency Flood Legend

Enabled by Ordnance Survey

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- Site Outline
- 250 / 500 Search Buffers (m)
- Zone 2 Floodplain
- Zone 3 Floodplain
- Flood Storage Area
- Area Benefiting from Flood Defences
- Flood Defences

6. Flooding

6.1 Zone 2 Flooding

Zone 2 floodplain estimates the annual probability of flooding as one in one thousand (0.1%) or greater from rivers and the sea but less than 1% from rivers or 0.5% from the sea. Alternatively, where information is available they may show the highest known flood level.

Is the site within 250m of an Environment Agency indicative Zone 2 floodplain? **No**

Database searched and no data found.

6.2 Zone 3 Flooding

Zone 3 estimates the annual probability of flooding as one in one hundred (1%) or greater from rivers and a one in two hundred (0.5%) or greater from the sea. Alternatively, where information is available they may show the highest known flood level.

Is the site within 250m of an Environment Agency indicative Zone 3 floodplain? **No**

Database searched and no data found.

6.3 Flood Defences

Are there any Flood Defences within 250m of the study site? **No**

6.4 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? **No**

6.5 Areas used for Flood Storage

Are there any areas used for Flood Storage within 250m of the study site? **No**

6.6 Groundwater Flooding Susceptibility Areas

Are there any British Geological Survey groundwater flooding susceptibility flood areas within 50m of the boundary of the study site? **No**

What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions? **Negligible**

6.7 Groundwater Flooding Confidence Areas

What is the British Geological Survey confidence rating in this result? **Moderately High**

Notes:

Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

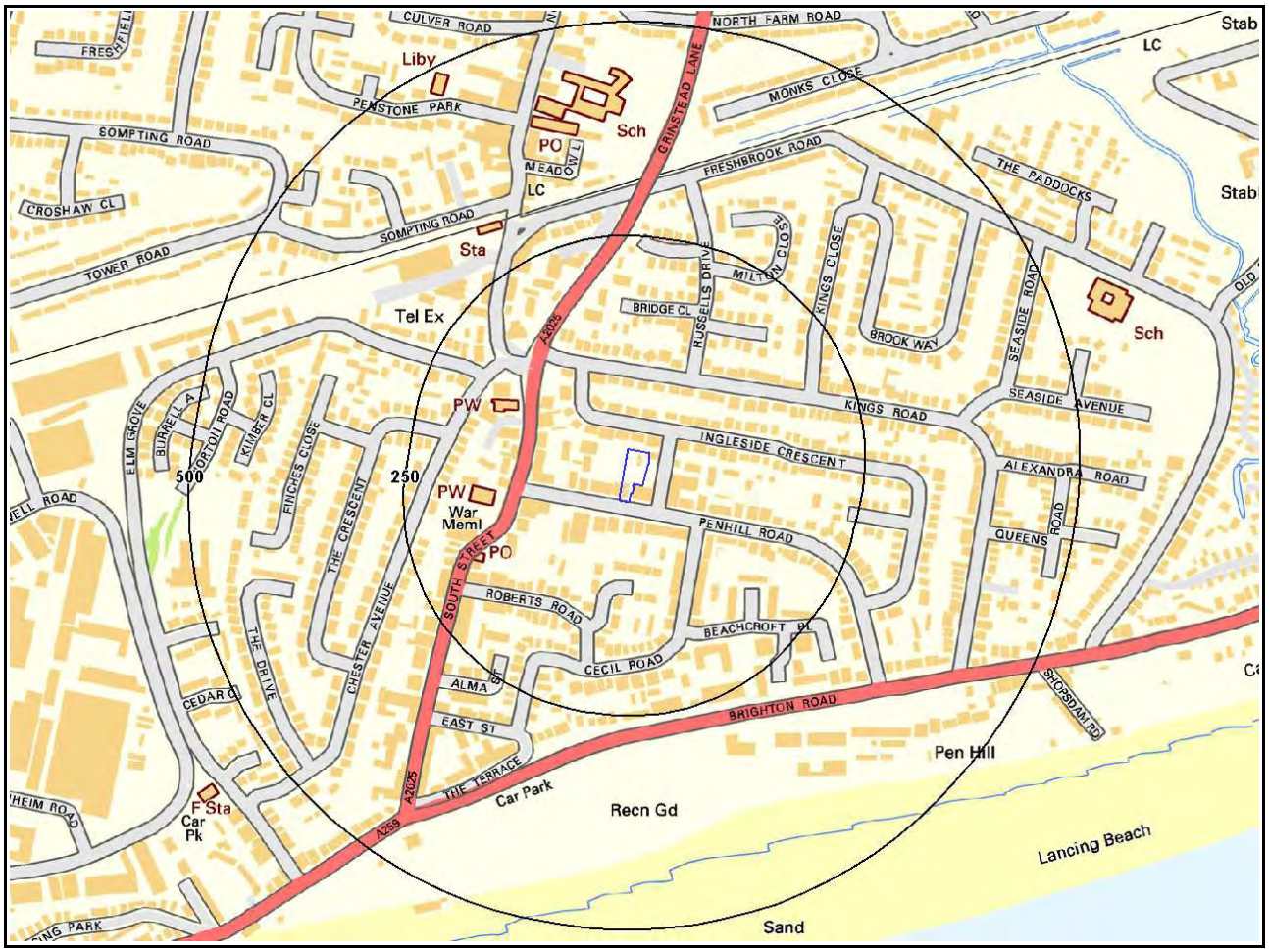
The **confidence rating** is on a fivefold scale - Low, Moderately Low, Moderate, Moderately High and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

7.Designated Environmentally Sensitive Sites Map

NW ▲ N NE

◄W E►

SW ▼ S SE



Designated Environmentally Sensitive Sites Legend

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Site Outline

Search Buffers (m) 250 500

SAC

SSSI

NNR

World Heritage Sites

SPA

Ramsar

LNR

Environmentally Sensitive Areas

Areas of Outstanding Natural Beauty

Nitrate Sensitive Areas

National Parks

7.Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 500m of the study site? **No**

Records of Sites of Special Scientific Interest (SSSI) within 500m of the study site: **0**

Database searched and no data found.

Records of National Nature Reserves (NNR) within 500m of the study site: **0**

Database searched and no data found.

Records of Special Areas of Conservation (SAC) within 500m of the study site: **0**

Database searched and no data found.

Records of Special Protection Areas (SPA) within 500m of the study site: **0**

Database searched and no data found.

Records of Ramsar sites within 500m of the study site: **0**

Database searched and no data found.

Records of Local Nature Reserves (LNR) within 500m of the study site: **0**

Database searched and no data found.

Records of World Heritage Sites within 500m of the study site: **0**

Database searched and no data found.

Records of Environmentally Sensitive Areas within 500m of the study site: **0**

Database searched and no data found.

Records of Areas of Outstanding Natural Beauty (AONB) within 500m of the study site: **0**

Database searched and no data found.

Records of National Parks (NP) within 500m of the study site: **0**

Database searched and no data found.

Records of Nitrate Sensitive Areas within 500m of the study site: **0**

Database searched and no data found.

Records of Nitrate Vulnerable Zones within 500m of the study site: **0**

Database searched and no data found.

8. Natural Hazards Findings

8.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a GroundSure GeoInsight, available from our website. The following information has been found:

8.1.1 Shrink Swell

What is the maximum Shrink-Swell* hazard rating identified on the study site? **Very Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

8.1.2 Landslides

What is the maximum Landslide* hazard rating identified on the study site? **Very Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
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.

8.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site? **Very Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant soluble rocks are present. Problems unlikely except with considerable surface or subsurface water flow. No special actions required to avoid problems due to soluble rocks. No special ground investigation required or increased construction costs are likely. An increase in financial risk due to potential problems with soluble rocks is unlikely.

8.1.4 Compressible Ground

What is the maximum Compressible Ground* hazard rating identified on the study site? **Negligible**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

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.

8.1.5 Collapsible Rocks

What is the maximum Collapsible Rocks* hazard rating identified on the study site? **Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

8.1.6Running Sand

What is the maximum Running Sand* hazard rating identified on the study site? **Low**

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property no significant increase in insurance risk due to running sand problems is likely.

* This indicates an automatically generated 50m buffer and site.

9.Mining

9.1 Coal Mining

Are there any coal mining areas within 75m of the study site? **No**

Database searched and no data found.

9.2 Shallow Mining

What is the subsidence hazard relating to shallow mining on-site*? **Low**

*Please note this data is searched with a 150m buffer.

9.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site? **No**

Database searched and no data found.

Standard Terms and Conditions

1 Definitions

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.

"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 ofthe level of likely risk and/or liability available from GroundSure.

"GroundSure" means GroundSure Limited, a company registered in England and Wales under number 03421028 and whose registered office is at Greater London House, Hampstead Road, London NW1 7EJ.

"Intellectual Property" means any patent, copyright, design rights, service marks, moral rights, data protection rights, know-how, trademark or any other intellectual property rights.

"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 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 ofthe 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 Guide" means the relevant current version of the user guide, available upon request from GroundSure.

2 Scope of Services

2.1 GroundSure agrees to carry out the Services in accordance with the Contract and to the extent set out therein.

2.2 GroundSure shall exercise all the reasonable skill, care and diligence to be expected of experienced environmental consultants in the performance of the Services.

2.3 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 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.

3 The Client's obligations

3.1 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 Contract).

3.3 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

4.1 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.

4.2 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.

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

4.4 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.

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 into any 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

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 full 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 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 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):

(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.

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 if 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.
7.8 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.
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.

8 GroundSure right to suspend or terminate

8.1 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 has been made good.
8.2 GroundSure may additionally terminate the Contract immediately on written notice in the event that:
(i) 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.
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, tempest or epidemic;
(iii) Acts of God or the public enemy;
(iv) riot, civil commotion or war;
(v) strikes, labour disputes or industrial action;
(vi) acts or regulations of any governmental or other agency;
(vii) suspension or delay of services at public registries by Data Providers; or
(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.
11.9 The Contract constitutes the entire contract between the parties and shall supersede all previous arrangements between the parties.
11.10 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisionsshall not in any way be tainted or impaired.
11.11 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.

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APPENDIX C

APPENDIX D

GroundSure RadonCheck

Address: 27,PENHILL ROAD,LANCING, BN15 8HA

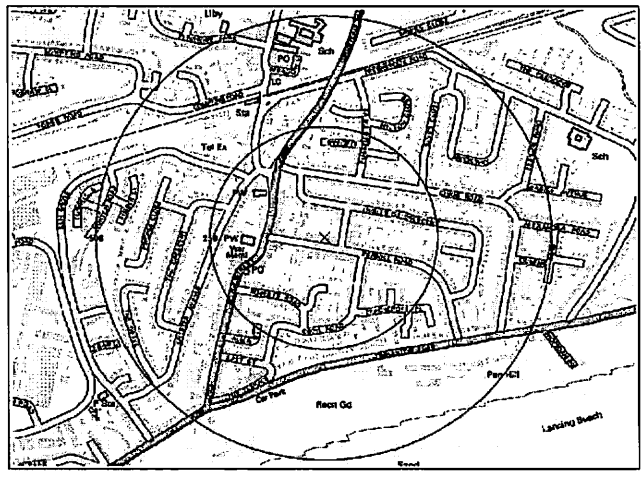
Date: Jan 31, 2011

GroundSure Reference: HMD-47-013488

Your Reference: Chadwick/1/PenhillRd

Grid Reference: 518358,104081

Client: Environmental Assessment Services Ltd



Brought to you by GroundSure

1. Residential Radon Potential Result

1.1 Is the property in a Radon Affected Area?

The information in this section provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as CON29 standard Enquiry of Local Authority; 3.13 Radon Gas: Location of the Property in a Radon Affected Area.

Question: 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?

Answer: The property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

1.2 Are Radon Protective Measures required?

The information in this section will detail the level of protection required for new dwellings under as described in the latest Building Research Establishment guidance on radon protective measures for new dwellings. This may include extensions to the property.

Question: 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?

Answer: No Radon Protective Measures are necessary.

1.3 Combined Radon Guidance

Radon is a colourless, odourless radioactive gas which is present in all areas of the United Kingdom, usually at levels that pose a negligible risk to homebuyers. However, in some areas levels of radon are much higher than in others, and in these cases it can pose a health risk. The data supplied by the Health Protection Agency (HPA) and the British Geological Survey (BGS) is not able to determine exact Radon levels, as this information can only be obtained through site-specific, in-situ testing. As 1-3% of properties in the area may be radon affected the HPA recommend carrying out a site-specific radon assessment. This costs £43.70 including VAT and the results are confidential to the client. Please contact the HPA (01235 831 600) for further information and advice.

If planning on building an extension or a new build property, no Radon Protective Measures are required.

1.4 Further details on Radon

Radon is a naturally occuring radioactive gas, which enters buildings from the ground. Outdoors, it is diluted to very low levels. However, in some cases the radon level indoors can build up to high

concentrations. In such cases, it does pose a serious risk to health. Exposure to high concentrations increases the risk of lung cancer. The Health Protection Agency recommends that radon levels should be reduced in homes where the annual average is at or above 200 becquerels per cubic metre (200 Bq m^{-3}). This is termed the Action Level. The Health Protection Agency defines Radon Affected Areas as those with 1% chance or more of a house having a radon concentration at or above the Action Level of 200 Bq m^{-3}.

The joint HPA-BGS digital Radon Potential Dataset used in this report provides the current definitive map of Radon Affected Areas in England and Wales.

Indoor radon levels can usually be substantially reduced at a cost comparable to many home improvements, such as replacing carpets. Details of methods of reducing radon levels are given on the Building Research Establishment Website. http://www.bre.co.uk/radon/index.html

searchcode

Search Code

Important Consumer Protection Information
This report is produced by GroundSure Ltd, of Lees House, 21 Dyke Road, Brighton, BN1 3FE (Tel: 08444 159 000, Fax: 01273 763569, Email: info@groundsure.com). GroundSure are committed to providing market leading environmental reports. GroundSure is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered firms maintain compliance with the Code.

The Search Code provides protection for homebuyers, sellers, conveyancers and mortgage lenders who rely on property search reports carried out on residential property within the United Kingdom. It sets out minimum standards which firms compiling and/or selling search reports have to meet. By giving you this information, your search provider is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles
Search providers which subscribe to the Code will:

- Display the Code logo prominently on their search reports.
- Act with integrity and carry out work with due skill, care and diligence.
- At all times maintain adequate and appropriate insurance to protect consumers.
- Conduct business in an honest, fair and professional manner.
- Handle complaints speedily and fairly.
- Ensure that all search services comply with the law, registration rules and standards.
- Monitor their compliance with the Code.

Complaints

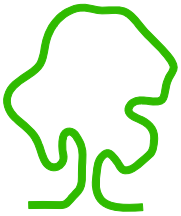
If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

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

TPOs Contact Details:
The Property Ombudsman scheme
Beckett House
4 Bridge Street
Salisbury
Wiltshire SP1 2LX
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk.

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE



eas ltd

Environmental Assessment Services Ltd

London Road, Hickstead, Haywards Heath, West Sussex RH17 5LZ UK

Phone : +44 (0) 1444 882 552 Fax : +44 (0) 1444 882 553

email : info@easltd.co.uk web site : www.easltd.co.uk