



# EnviroSmart

Site address	30 - 38 Chester Road Northwood Middlesex HA6 1BQ
Site coordinates	509640, 191230
Report prepared for	Seymour House Residential Care Homes Ltd Seymour House 13-17 Rectory Road Rickmansworth Hertfordshire WD3 1FH
Report reference	71270R1
Report status	Final
Date issued	October 2020
Report author	Jessica Bayliff Consultant
Report check & review	Alan White Principal consultant






# Report summary: contaminated land risks

The purpose of this EnviroSmart report is to provide clear and pragmatic advice regarding the nature and potential significance of contaminated land hazards which may be present at the study site. GeoSmart are providing consultancy and professional opinion based upon our collation, interpretation and assessment of information contained within an Envirocheck report, and other sources where expressly stated (i.e. site visits, photographs, and anecdotal evidence).

As such, potential contaminated land risks have been assessed by considering two key items:

1. The likelihood that **sources of contamination** are present within the sub surface beneath the site. This gives a measure of the potential for contamination to be occurring at the site.
2. The **consequence or severity of any impacts** should contamination be present. The consequence or severity of impact is inferred from the nature of any **potential receptors** (i.e., something that could be adversely affected by a contaminant, such as people, an ecological system, property or a water body) as well as any **relevant pathways** (i.e., a route or means by which a receptor can be exposed to or affected by a contaminant) relating to the site and the surrounding area.

The assessment findings are summarised as follows:

1. <b>Probability/likelihood</b> of contamination being present at the Site	High likelihood	
	Likely	
	Low likelihood	
	<b>Unlikely</b>	
2. Potential <b>severity/consequence</b> of any impacts	Severe	
	<b>Medium</b>	
	Mild	
	Minor	
3. <b>Overall land quality risks posed by the Site</b>	Very high	
	High	
	Moderate	
	Moderate/low	
	<b>Low</b>	
	Very low	

## Risk Key

Very High	High	Moderate	Moderate/Low	Low	Very Low
There is a high probability that severe harm could arise to a designated receptor from an identified hazard without appropriate remediation action	Harm is likely to arise to a designated receptor from an identified hazard at the site without appropriate remediation action	It is possible that without appropriate remediation action harm could arise to a designated receptor. It is relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely that such harm would be relatively mild	It is possible that harm could arise to a designated receptor from an identified hazard. It is likely any harm would be mild	It is possible that harm could arise to a designated receptor from an identified hazard. It is likely that, at worst if any harm was realised any effects would be mild	The presence of an identified hazard does not give rise to the potential to cause harm to a receptor

It is acknowledged that the risk assessment findings are based on documentary sources of information alone. Typically a proportionate programme of intrusive site investigations would be required to fully verify these findings.



## Recommendations (for next steps)

✓	<b>No immediate action but observe a watching brief</b>	<p>It is considered possible that localised contamination is present within the sub-surface in the north east of the Site due to the presence of Made Ground associated with former construction and demolition activities. However, given that the proposed development comprises hardstanding across the Site in this area, the preliminary risk assessment suggests that the majority of risks posed by in situ land quality to human health is therefore likely to be low.</p> <p>It is noted that whilst a limited intrusive site investigation (including appropriate laboratory testing of soil samples) could be adopted in order to validate the preliminary risk assessment conclusions, a watching brief during all proposed redevelopment activities will likely be sufficient.</p> <p>The watching brief should be maintained throughout the entire development phase of works and any possible evidence of contamination encountered during the redevelopment works should be alerted to the Local Authority. Appropriate actions would then be required to further inspect, sample and analyse any suspect materials, and formulate an appropriate remediation plan, as necessary.</p>
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GeoSmart would be delighted to provide further information and a site specific quotation in relation to the above recommendations.

Please contact [info@geosmartinfo.co.uk](mailto:info@geosmartinfo.co.uk) for further advice.



# 1. Introduction

## 1.1 Background

The study site (from herein known as 'the Site') is situated at 30 - 38 Chester Road in Northwood, Middlesex. A location plan of the Site is shown in Section 1.5. A proposed development plan of the Site is shown in Section 1.6.

GeoSmart was commissioned by Seymour House Residential Care Homes Ltd in October 2020 to undertake a Phase 1 Land Quality Assessment for the Site. The report has been requested in order to support a proposed planning application for the Site.

The proposed development is for the construction of a 29 bedroom residential care home for the elderly with landscaped/garden areas and the change of use of three rear bedrooms to storage and ancillary rooms to No.34 Chester Road.

The EnviroSmart report has been undertaken by firstly compiling information concerning the Site and the surrounding area, including current and historical land uses, geological records and registered pollution incidents. The information which is gathered is then used to construct a 'conceptual site model', including an understanding of likely contaminant sources, pathways and receptors. Finally, a preliminary assessment of risks posed to identified receptors (i.e., people, buildings or the natural environment) from the anticipated land quality at the Site is performed. The risk assessment methodology is consistent with CIRIA C552 (2001).

## 1.2 Purpose of this report

The purpose of this EnviroSmart report is to provide clear and pragmatic advice regarding the nature and potential significance of contamination hazards which may be present at the Site.

## 1.3 Report contents

This report is divided into two sections, as described below:

Section	Content	Purpose
Section 2: <b>LAND QUALITY ASSESSMENT</b>	A summary of the site history and environmental setting, the findings of the preliminary risk assessment and associated recommendations	To present a clear and concise overview of the land quality issues facing the Site, including recommendations of how to manage any land contamination which may be present
Section 3: <b>SUPPORTING INFORMATION</b>	A collection of site specific information on which the land quality assessment is based	To provide detailed information in support of our findings with references and site photographs

## 1.4 Report limitations

It is noted that the findings presented in this report are largely based on information supplied by third parties. Whilst we assume that all information is representative of past and present conditions we can offer no guarantee as to its validity.

GeoSmart did not undertake a site visit as part of this assessment. Photographs included in Section 3.2 were provided by the client. GeoSmart can not be held responsible for their accurate representation.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

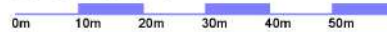


# 1. Introduction

## 1.5 Site location plan



SCALE



1/1250 A4  
LOCATION PLAN

### LF DESIGN ENTERPRISES

URBAN DESIGN & ARCHITECTURAL SERVICES

37 Douglas Av. ST4 5JY  
Stoke-on-Trent  
Tel: 01782 411 847  
Mob: 07914 55-35-63  
E-mail: info@art-gift.uk  
www.fenwick-design.co.uk

#### PROJECT TITLE

Proposed development:  
Residential Care Home  
38-30 Chester Road, Northwood  
London

#### CLIENT

Seymour House Residential Care Homes LTD

#### PROJECT NUMBER

Location plan

#### DRAWING TITLE

Location plan

DRAWING No SCH01\_20-1

DATE  
January 2020

SCALE  
A4@1:250

REV.



# 1. Introduction

## 1.6 Proposed Site development plan






## 2. Land quality assessment

### 2.1 Site details

Site name:	30 - 38 Chester Road	Current land cover:	Vacant land with patchy hardstanding located in the north east of the Site, matching the footprint of the former development.
Current use:	Vacant land at 30 - 32 Chester Road		
Proposed use:	Care home	Site area:	0.12 ha

### 2.2 Conceptual understanding (potential sources of contamination)

<div></div> <div>Site history <i>(historical land use taken within 250m radius of the Site boundary)</i></div>	Date	Description of land use		
		On-Site	Off-Site	
	1868	The Site is undeveloped	There is a pond c. 110 m north east of the Site.	
	1883	No change		
	1896	The Site remains unchanged but is now bound to the north by Chester Road.	The pond is no longer present. There is a railway line c. 285 m south west of the Site.	
	1898	No change		
	1899			
	1913	The Site is developed with two semi detached residential dwellings in the north of the Site.	The wider area around the Site has undergone residential development. There have also been two nurseries developed c. 155 m and c. 185 m north west and a third c. 110 m south of the Site.	
	1914			
	1920	No change		
	1932	No change	The nursery to the south is no longer present.	
	1935	No change	The nursery c. 185 m north west is no longer present.	
	1938	No change		
	1960	There has been a small extension added into the western house and also a structure built in the garden area in the south western corner of the Site.	A coal yard is labelled c. 270 m west of the Site.	
	1965	No change		
1970	The structure in the south western corner of the Site is no longer present and is assumed to have been demolished.	No change		
POTENTIAL SOURCES OF CONTAMINATION				Source description
				<p>The land use history suggests that there is the potential for contamination to have occurred on-Site relating to the following:</p> <p><b>Residential</b></p> <ul style="list-style-type: none"><li>- Miscellaneous small scale fuel or chemical spills relating to domestic land-uses.(i.e., fuels used for garden machinery, herbicides, paints/creosote, detergents, etc.)</li><li>- Potential for localised/historical deposition of residential waste materials (ash, litter, packaging, etc.).</li><li>- Made Ground/demolition waste materials associated with former development/demolition activities.</li><li>- Asbestos containing materials (ACM) may have been incorporated within the built structures in the past; the disturbance of any such materials may have resulted in asbestos being present within the sub surface surrounding the buildings.</li><li>- Potential for atmospheric deposition of generic air borne contaminants including lead (historically derived from engine exhaust emissions).</li></ul> <p><b>Use of Site in conjunction with neighbouring redevelopment</b></p> <ul style="list-style-type: none"><li>- Miscellaneous low level chemical and fuel spills/leaks (i.e., engine oils, lubricants, greases, antifreeze residues, etc.) associated with cars parked on the Site.</li><li>- Potential for localised deposition of construction waste materials/effluents on-Site.</li></ul>
LOW LIKELIHOOD				PROBABILITY OF CONTAMINATION

The land use history suggests that there is the potential for contamination to have occurred on-Site relating to the following:

#### Residential

- Miscellaneous small scale fuel or chemical spills relating to domestic land-uses.(i.e., fuels used for garden machinery, herbicides, paints/creosote, detergents, etc.)
- Potential for localised/historical deposition of residential waste materials (ash, litter, packaging, etc.).
- Made Ground/demolition waste materials associated with former development/demolition activities.
- Asbestos containing materials (ACM) may have been incorporated within the built structures in the past; the disturbance of any such materials may have resulted in asbestos being present within the sub surface surrounding the buildings.
- Potential for atmospheric deposition of generic air borne contaminants including lead (historically derived from engine exhaust emissions).


#### Use of Site in conjunction with neighbouring redevelopment

- Miscellaneous low level chemical and fuel spills/leaks (i.e., engine oils, lubricants, greases, antifreeze residues, etc.) associated with cars parked on the Site.
- Potential for localised deposition of construction waste materials/effluents on-Site.



## 2. Land quality assessment



### 2.2 Conceptual understanding (potential sources of contamination)

<div></div> <div>Site history</div> <div>(historical land use taken within 250m radius of the Site boundary)</div>	Date	Description of land use		POTENTIAL SOURCES OF CONTAMINATION	Source description	LOW LIKELIHOOD	PROBABILITY OF CONTAMINATION
	On-Site	Off-Site					
	1976	No change	The nursery c. 155 m north west is no longer present and this area has been redeveloped with residential housing.				
	1978	No change	Part of the coal yard has been redeveloped as a car park and the coal yard has moved down the railway line, further to the south east.				
	1986	No change					
	1990						
	1992						
	1999						
	1999 - 2006	Aerial imagery shows no change	Aerial imagery shows no sign of the coal yard to the south west of the Site.				
	2010 - 2013	Aerial imagery shows no change	Aerial imagery shows the residential houses adjacent to the east of the Site have been demolished and development of a single large structure is occurring.				
	2015	Aerial imagery shows both semi detached houses have been demolished and the Site is being used for access to the neighbouring Site during construction, storage of building materials and also parking of vehicles likely associated with the off-Site development to the east.	Aerial imagery shows there has been an extension of the development to the east of the Site adjacent to the eastern Site boundary.				
	2016 - 2018	The Site no longer appears to be used for access to the neighbouring property, however the north east of the Site still appears to be used for storage of materials. There has been a boundary wall/fencing constructed along the eastern Site boundary.	Aerial imagery shows no change				
Other Evidence	The client stated that the pair of residential houses were used as a residential children's care home prior to demolition in 2013.						



## 2. Land quality assessment




### 2.2 Conceptual understanding (potential sources of contamination)

<div></div> <div>Current land use</div>	<p>The Site is currently used vacant land, with patchy hardstanding in the north east of the Site.</p> <p>There are no known buried storage tanks at the Site.</p> <p>There is no known bulk fuel or chemical storage on Site.</p>			POTENTIAL SOURCES OF CONTAMINATION	<p>Given the Site's current use, there is potential for localised contamination relating to the following:</p> <p>Made Ground/demolition waste materials associated with former development/demolition activities.</p>	LOW LIKELIHOOD																																																						
<div></div> <div>Neighbouring industrial land uses <i>(see environmental data report in Section 3.3 for full listing)</i></div>	<p>There are one or more potentially contaminative land uses are located within 250 m of the Site:</p> <table><tr><th>Distance from Site</th><th>Number of active industrial land uses</th><th>Number of inactive industrial land uses</th></tr><tr><td>0 - 50 m</td><td>0</td><td>0</td></tr><tr><td>50 - 100m</td><td>0</td><td>0</td></tr><tr><td>100 - 250 m</td><td>0</td><td>1</td></tr></table> <table><tr><th>Nr</th><th>Nearest distance</th><th>Land use / permitted activity / authorisation</th></tr><tr><td>0</td><td>NA</td><td>Fuel station entries</td></tr><tr><td>0</td><td>NA</td><td>Gas pipelines</td></tr><tr><td>0</td><td>NA</td><td>Underground electrical cables</td></tr><tr><td>0</td><td>NA</td><td>Control of major accident hazards sites (COMAH)</td></tr><tr><td>0</td><td>NA</td><td>Notification of installations handling hazardous substances (NIHHS)</td></tr><tr><td>0</td><td>NA</td><td>Explosives sites</td></tr><tr><td>0</td><td>NA</td><td>Planning hazardous substance consents</td></tr><tr><td>0</td><td>NA</td><td>Planning hazardous substance enforcements</td></tr><tr><td>0</td><td>NA</td><td>Sites determined as Contaminated Land under Part IIA of the Environmental Protection Act 1990</td></tr><tr><td>0</td><td>NA</td><td>Records of Licensed Discharge Consents.</td></tr><tr><td>0</td><td>NA</td><td>Local Authority pollution prevention and control sites</td></tr><tr><td>0</td><td>NA</td><td>Local Authority pollution prevention and control enforcements</td></tr><tr><td>0</td><td>NA</td><td>Records of Category 3 or 4 Radioactive Substance Licences</td></tr></table>				Distance from Site	Number of active industrial land uses	Number of inactive industrial land uses	0 - 50 m	0	0	50 - 100m	0	0	100 - 250 m	0	1	Nr	Nearest distance	Land use / permitted activity / authorisation	0	NA	Fuel station entries	0	NA	Gas pipelines	0	NA	Underground electrical cables	0	NA	Control of major accident hazards sites (COMAH)	0	NA	Notification of installations handling hazardous substances (NIHHS)	0	NA	Explosives sites	0	NA	Planning hazardous substance consents	0	NA	Planning hazardous substance enforcements	0	NA	Sites determined as Contaminated Land under Part IIA of the Environmental Protection Act 1990	0	NA	Records of Licensed Discharge Consents.	0	NA	Local Authority pollution prevention and control sites	0	NA	Local Authority pollution prevention and control enforcements	0	NA	Records of Category 3 or 4 Radioactive Substance Licences	<p>Despite the presence of potential contaminative activities in the area surrounding the Site, since none occur within close proximity (i.e., within a 50 m radius of the Site) they are unlikely to pose a significant contamination hazard in relation to the Site itself.</p> <p><b>Contemporary trade directory entries include:</b> DS&amp;P Services Ltd (inactive) wrought ironwork c. 140 m north.</p>	UNLIKELY
Distance from Site	Number of active industrial land uses	Number of inactive industrial land uses																																																										
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## 2. Land quality assessment

### 2.2 Conceptual understanding (potential sources of contamination)

 <p><b>EA recorded pollution incidents</b> (see environmental data report in Section 3.3 for full listing)</p>	<p>One or more Environment Agency pollution incidents have been recorded within 250 m of the Site. These include:</p> <p>An incident occurred in on an unknown date c. 220 m west of the Site. The pollutant was unknown sewage and the incident was categorised as minor.</p> <p>An incident occurred in 1994 c. 240 m west of the Site. The pollutant was unknown sewage and the incident was categorised as minor.</p>	<b>POTENTIAL SOURCES OF CONTAMINATION</b>	<p>Given the scale, timing, location and nature of the recorded incidents these past events do not appear to pose a significant contamination hazard to the Site.</p>	<b>UNLIKELY</b>	<b>PROBABILITY OF CONTAMINATION</b>
 <p><b>Landfills / waste sites</b> (taken within 500m radius of the Site boundary, see environmental data report in Section 3.3 for full listing)</p>	<p>There are no Environment Agency listed historical landfills located within 500 m of the Site.</p> <p>There are no Environment Agency listed operational landfills located within 500 m of the Site.</p> <p>There are no Local Authority listed historical landfills located within 500 m of the Site.</p> <p>The following other waste sites are registered within 500 m of the Site:</p> <ul style="list-style-type: none"> <li>0 Records of registered waste transfer sites.</li> <li>0 Records of registered waste treatment or disposal sites.</li> <li>0 Records of licenced waste management facilities.</li> </ul>		<p>Given the absence of any historical or operational landfills within close proximity of the Site no associated contamination hazards have been identified.</p> <p>Given the absence of any waste treatment, transfer or disposal sites within close proximity of the Site no associated contamination hazards have been identified.</p>	<b>NEGLECTIBLE</b>	
 <p><b>Radon</b> (see environmental data report in Section 3.3 for full listing)</p>	<p>According to current UK radon mapping the Site lies in an area where &lt;1% of homes are at or above the UK radon action level (200 Bq/m3).</p>		<p>&lt;1% of homes are at or above the UK radon action level (200 Bq/m3).</p>	<b>UNLIKELY</b>	






## 2. Land quality assessment

2.3 Conceptual understanding (environmental sensitivity / potential severity of impacts)					
 <b>Geology and Groundwater</b> <i>(see the environmental data report in Section 3.3 for full details)</i>	<p>British Geological Survey mapping indicates the absence of any superficial deposits beneath the Site.</p> <p>British Geological Survey mapping indicates that the bedrock geology consists of London Clay Formation, which comprises of clay, silt and sand and is classified as Unproductive Strata.</p> <p>According to the GeoSmart Groundwater Flood Risk (GW5) Map (GeoSmart, 2018). The risk of groundwater flooding at the Site is 'negligible'.</p> <p>The Site lies within an outer Source Protection Zone (SPZ II).</p> <p>There are no groundwater abstraction licences within 1 km of the Site.</p>	<b>POTENTIAL RECEPTORS</b>	<p>Unproductive Strata typically have low permeability and offer negligible water supply or river base flow potential.</p> <p>Based on the susceptibility of the Site to groundwater flooding, a groundwater flood risk assessment is not considered necessary for the Site.</p> <p>The depth to groundwater beneath the Site is unknown.</p> <p>The absence of any groundwater abstractions does not necessarily indicate a low resource potential. Small scale abstractions, such as for private water supplies, may not be listed.</p>	<b>POTENTIAL SEVERITY OF IMPACT</b>	<b>MINOR</b>
	 <b>Geohazards</b> <i>(see the environmental data report in Section 3.3 for full details)</i>		<p>The Site does not lie within an identified coal mining area and is therefore unlikely to be affected by related ground stability or mine gas issues.</p> <p>The Site does not lie within an area of former brine working and is therefore unlikely to be affected by related ground stability issues.</p> <p><b>BGS Recorded Mineral Site</b>  Hallowell Road Chalkwell c. 250 m south west. Type: Underground. Commodity: Chalk. Status: Ceased.</p> <p><b>Man-Made Mining Cavities</b>  There is a chalkwell located 220 m west of the Site.</p> <p>BGS GeoIndex Onshore mapping shows there is no mapped artificial ground at the Site.</p> <p>The Site has ground stability hazards that should be considered further as part of the redevelopment plans.</p>		
	<p>The Site does not lie within a 'Coal Mining Reporting Area'.</p> <p>There are no brine affected areas within 75 m of the Site.</p> <p>The following is recorded within 500m of the Site:</p> <p>No or limited artificial ground / Made Ground is anticipated on Site.</p> <p>The following natural hazards are present at or within 50 m of the Site:</p> <p>Shrink swell</p>				



## 2. Land quality assessment



2.3 Conceptual understanding (environmental sensitivity / potential severity of impacts)					
 <p><b>Surface water</b> (see the environmental data report in Section 3.3 for full details)</p>	<p>The nearest water feature is a drain, located c. 240 m west of the Site boundary.</p> <p>The Site lies within a Flood Zone 1.</p> <p>There are no surface water abstraction licences within 1 km of the Site.</p>	<b>POTENTIAL RECEPTORS</b>	<p>Given the distance from the Site and the nature of the local geology, the sensitivity of local surface waters is judged to be low.</p>	<b>MINOR</b>	<b>POTENTIAL SEVERITY OF IMPACT</b>
 <p><b>Environmental designations</b> (see the environmental data report in Section 3.3 for full details)</p>	<p>There are no environmentally sensitive land uses within 500 m of the Site.</p>		<p>No relevant environmentally designated sites/receptors have been identified.</p>	<b>NEGLIGIBLE</b>	
 <p><b>Human receptors</b></p>	<p>Proposed residents/users of the Site plus neighbouring residences.</p>		<p>Human receptors are proposed to be present on Site.</p>	<b>SEVERE</b>	



## 2. Land quality assessment



2.4 Regulator perspective		
Consultation date	21st October 2020	London Borough of Hillingdon
GeoSmart consultant	Jessica Bayliff	Environmental Health
Consultation outcome	The Council did not respond to GeoSmart within the time frame of this report.	



## 2. Land quality assessment

### 2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
<b>On-Site sources</b> - Made Ground associated with former residential development and demolition								
1	Potential for <b>inorganic</b> and low volatility organic contaminants to be present within the subsurface <b>soils</b>	Dermal contact, soil & soil dust ingestion, inhalation of soil dust	HH	Current/future Site occupants	<b>MEDIUM</b>	<b>UNLIKELY</b>	<b>LOW RISK</b>	Given the likely presence of Made Ground beneath the Site, any residual contamination associated with this material has the potential to impact on future site users. However, the area of potential Made Ground is confined to the north east of the Site, and will be beneath the proposed care home building, no routine exposure to any subsurface contamination is considered likely.
2		Consumption of home grown produce	HH		<b>MEDIUM</b>	<b>UNLIKELY</b>	<b>LOW RISK</b>	
3		Ingress into water supply pipework and subsequent water ingestion	HH		<b>MEDIUM</b>	<b>UNLIKELY</b>	<b>LOW RISK</b>	
4		Building materials in direct contact with aggressive ground	PROP	Current/future Site buildings	<b>MILD</b>	<b>UNLIKELY</b>	<b>VERY LOW RISK</b>	Aggressive ground conditions are not anticipated to be present.
5		Dissolution into pore water/shallow groundwater and subsequent migration	CW	London Clay Formation (an Unproductive Strata)	<b>MILD</b>	<b>LOW LIKELIHOOD</b>	<b>LOW RISK</b>	The risk classification reflects the local groundwater sensitivity (low resource value).
6		Dissolution into pore water/shallow groundwater and subsequent lateral migration	CW	Drain (c. 240 m west)	<b>MILD</b>	<b>UNLIKELY</b>	<b>VERY LOW RISK</b>	The risk classification reflects the reasonable distance to the nearest surface water feature.
7		Dissolution into aqueous phase and preferential migration via drainage structures	CW		<b>MILD</b>	<b>UNLIKELY</b>	<b>VERY LOW RISK</b>	



## 2. Land quality assessment

### 2.5 Preliminary Risk Assessment

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
8	Potential for <b>volatile organic</b> contaminants to be present within the subsurface <b>soils</b>	Dermal contact, ingestion & inhalation of soils & soil dust	HH	Current/future Site occupants	MEDIUM	UNLIKELY	LOW RISK	Given the likely presence of Made Ground beneath the Site, any residual contamination associated with this material has the potential to impact on future site users. However, the area of potential Made Ground is confined to the north east of the Site, and will be beneath the proposed care home building, no routine exposure to any subsurface contamination is considered likely.
9		Consumption of home grown produce	HH		MEDIUM	UNLIKELY	LOW RISK	
10		Ingress into water supply pipework and subsequent water ingestion	HH		MEDIUM	UNLIKELY	LOW RISK	
11		Migration of vapours to surface; inhalation indoors	HH		MEDIUM	UNLIKELY	LOW RISK	
12		Migration of vapours to surface; inhalation outdoors	HH		MEDIUM	UNLIKELY	LOW RISK	
13		Building materials in direct contact with aggressive ground	PROP	Current/future Site buildings	MILD	UNLIKELY	VERY LOW RISK	Aggressive ground conditions are not anticipated to be present.
14		Dissolution into pore water/shallow groundwater and subsequent migration	CW	London Clay Formation (an Unproductive Strata)	MILD	LOW LIKELIHOOD	LOW RISK	The risk classification reflects the local groundwater sensitivity (low resource value).
15		Dissolution into pore water/shallow groundwater and subsequent migration	CW	Drain (c. 240 m west)	MILD	UNLIKELY	VERY LOW RISK	The risk classification reflects the reasonable distance to the nearest surface water feature.
16		Dissolution into aqueous phase and preferential migration via drainage structures	CW		MILD	UNLIKELY	VERY LOW RISK	




## 2. Land quality assessment

2.5 Preliminary Risk Assessment								
Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
17	Potential for <b>asbestos</b> containing materials within the subsurface soils	Liberation of sub surface ACMs and inhalation of asbestos fibres	HH	Current/future Site occupants	<b>MEDIUM</b>	<b>LOW LIKELIHOOD</b>	<b>MODERATE/LOW RISK</b>	Given the age of the previous buildings, asbestos-containing material may have been present within the building fabric and surrounding subsoils.
18	Potential for <b>dissolved phase</b> contaminants to be present within <b>shallow groundwater</b>	Lateral and vertical groundwater movement via natural or artificial flow paths	CW	London Clay Formation (an Unproductive Strata)	<b>MILD</b>	<b>LOW LIKELIHOOD</b>	<b>LOW RISK</b>	The risk classification reflects the local groundwater sensitivity (low resource value).
19		Lateral and vertical groundwater movement via natural or artificial flow paths	CW	Drain (c. 240 m west)	<b>MILD</b>	<b>UNLIKELY</b>	<b>VERY LOW RISK</b>	The risk classification reflects the reasonable distance to the nearest surface water feature.
20	Potential for elevated <b>methane</b> to be present within the sub-surface soils	Lateral and vertical migration into on-Site buildings; potential to cause an explosion	HH	On-Site properties and their occupants	<b>SEVERE</b>	<b>NEGLIGIBLE</b>	<b>NO DISCERNABLE RISK</b>	The gas generation potential of on-Site materials is considered to be limited.
21		Lateral migration towards off-Site buildings; potential to cause an explosion	HH	Off-Site properties and their occupants	<b>SEVERE</b>	<b>NEGLIGIBLE</b>	<b>NO DISCERNABLE RISK</b>	
22	Potential for elevated <b>carbon dioxide</b> to be present within the subsurface soils	Lateral and vertical migration into on-Site buildings; potential to cause asphyxiation	HH	Occupants of on-Site buildings	<b>SEVERE</b>	<b>NEGLIGIBLE</b>	<b>NO DISCERNABLE RISK</b>	
23		Lateral migration towards off-Site buildings; potential to cause asphyxiation	HH	Occupants of off-Site buildings	<b>SEVERE</b>	<b>NEGLIGIBLE</b>	<b>NO DISCERNABLE RISK</b>	
24	Potential for <b>radon</b> within the subsurface	Lateral migration towards on-Site buildings; potential to cause long term health effects	HH	Occupants of on-Site buildings	<b>MEDIUM</b>	<b>UNLIKELY</b>	<b>LOW RISK</b>	The Site lies in an area where <1% of homes are at or above the UK radon action level (200 Bq/m3).
OVERALL RISK RATING							<b>LOW RISK</b>	





## 2. Land quality assessment

2.6 Next steps			
✓	<b>No immediate action but observe a watching brief</b>		<p>It is considered possible that localised contamination is present within the sub-surface in the north east of the Site due to the presence of Made Ground associated with former construction and demolition activities. However, given that the proposed development comprises hardstanding across the Site in this area, the preliminary risk assessment suggests that the majority of risks posed by in situ land quality to human health is therefore likely to be <b>low</b>.</p> <p>It is noted that whilst a limited intrusive site investigation (including appropriate laboratory testing of soil samples) could be adopted in order to validate the preliminary risk assessment conclusions, a watching brief during all proposed redevelopment activities will likely be sufficient.</p> <p>The watching brief should be maintained throughout the entire development phase of works and any possible evidence of contamination encountered during the redevelopment works should be alerted to the Local Authority. Appropriate actions would then be required to further inspect, sample and analyse any suspect materials, and formulate an appropriate remediation plan, as necessary.</p>





### 3. Supporting information

The following supporting information is contained in this section:

Section	Content
3.1	Referenced materials used in the EnviroSmart reporting
3.2	Site photographs

#### Disclaimer

This report has been prepared by GeoSmart in its professional capacity as soil and water specialists, with reasonable skill, care and diligence within the agreed scope and terms of contract and taking account of the manpower and resources devoted to it by agreement with its client, and is provided by GeoSmart solely for the internal use of its client.

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## 3. Supporting information

### Important consumer protection information

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  - sets out minimum standards which firms compiling and selling search reports have to meet
  - promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals
  - enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.
- By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

#### The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search 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 products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

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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

Milford House

43-55 Milford Street

Salisbury

Wiltshire SP1 2BP

Tel: 01722 333306

Fax: 01722 332296

Website: [www.tpos.co.uk](http://www.tpos.co.uk)

Email: [admin@tpos.co.uk](mailto:admin@tpos.co.uk)

You can get more information about the PCCB from [www.propertycodes.org.uk](http://www.propertycodes.org.uk).

*Please ask your search provider if you would like a copy of the search code*





### 3. Supporting information

A key commitment under the Code is that firms will handle any complaints both speedily and fairly

If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

Complaints should be sent to:

Jemma Prydderch  
Operations Manager

GeoSmart Information Limited  
Suite 9-11, 1st Floor  
Old Bank Buildings, Bellstone  
Shrewsbury  
SY1 1HU

Tel: 01743 298100  
jemmaprydderch@geosmartinfo.co.uk

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman Scheme (TPOs): Tel: 01722 333306, E-mail: [admin@tpos.co.uk](mailto:admin@tpos.co.uk)

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision.





## 3. Supporting information

### 3.1 References

The following references were used to inform the conceptual site model and preliminary risk assessment:

British Geological Survey, 2018. Geology of Britain viewer (<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>)

British Standards Institute, 2011. Investigation of potentially contaminated sites – code of practice. BS10175:2011+A1:2013.

CIRIA, 2001. Contaminated land risk assessment. A guide to good practice. Publication C552. CIRIA London. ISBN 0-86017-552 9

Environment Agency, 2004. Publication CLR 11. Model Procedures for the Management of Land Contamination.

GeoSmart Information Limited, 2018. National Groundwater Flood Risk Map (GW5)

Health Protection Agency, 2000. Spring 2000 Newsletter featuring: Radon: Guidance on Protective Measures for New Dwellings (BR 211).

Landmark, 2018. Landmark Envirocheck report 30-38 Chester Road, Northwood, Middlesex, HA6 1BQ. REF: 189165428\_1\_1



### 3. Supporting information

#### 3.2 Site photographs

**Photograph 1: View of the Site before demolition took place facing south west.**



**Photograph 2: View of the Site, following demolition, facing south west.**







**Photograph 3: View along the eastern boundary of the Site facing north east.**



**Photograph 4: View of the north of the Site facing north west.**







**Photograph 5: View from the eastern Site boundary facing south west.**



**Photograph 6: View of the neighbouring residential care homes to the east of the Site.**

