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Phase 1 Contaminated Land Desk Study Report

Site address:	Transport House Uxbridge Road Hillingdon Uxbridge UB10 0LY
Report prepared for:	Mr.B.S.Gill Suite 7, Ealing House 33 Hanger Lane London W5 3HJ
Report reference:	63813R1
Report status:	Final
Date issued:	June 2015
Report author:	Johnathan Green **Land consultant**
Report check & review:	Joe Gomme **Principal consultant**

envirep
New Zealand House, 160 Abbey Foregate, Shrewsbury, SY2 6FD, UK
t +44(0)845 606 6650 f +44(0)1743 248600 e info@envirep.co.uk

The purpose of this 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.

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

✓	**No immediate action but observe a watching brief**	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.

1. INTRODUCTION

1.1 Background

The study site (from herein known as 'the Site') is situated at Transport House in Uxbridge Road, Uxbridge. 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.

Envirep was commissioned by Mr.B.S.Gill in June 2015 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 application is for the change of use from commercial offices to residential flats.

The Phase 1 assessment 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); see Section 3.4 for details.

1.2 Purpose of this Report

The purpose of this 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: **LAND QUALITY ASSESSMENT**	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: **SUPPORTING INFORMATION**	A collection of site specific information on which the land quality assessment is based	To provide detailed information in support of the risk assessment; this section also represents a source of reference data for use in any subsequent site works/assessments

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.

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

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The representation of a road, track or path is no evidence of a right of way. The representation of features as lines is no evidence of a property boundary.

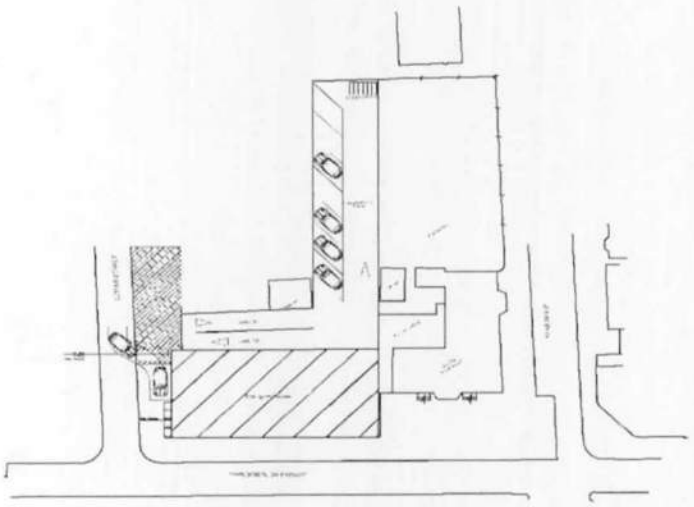
Metres
0 10 20 30 40 50
1:1250

Supplied by: **Stanfords 21 May 2015**
Stanfords Ordnance Survey Partner
Licence: 100035409
Order Licence Reference: OI857994
Centre coordinates: 507947 182313

N

Transport House, Uxbridge Rd,
Hillingdon, Uxbridge
UB10 0LY

1.6 Proposed Site Development Plan



Gill & Associates EALING HOUSE, SUIT 7 33 HANGER LANE LONDON W5 3HJ		BLOCK PLAN TRANSPORT HOUSE, HILLINGDON UB10 0LY
DRAWN: BSG	DATE:	
CHECKED:		SIZE: A3 / PSCM NO. / DWG NO. / REV: 0
DESIGN: BSG		SCALE: 1 : 500 / SHEET 7 OF 7

2.1 Site Details

Site name:	Transport House	**Current land cover:**	100% hardstanding
Current use:	Offices/meeting rooms		
Proposed use:	Residential flats	**Site area:**	0.08 ha

2.2 Conceptual Understanding (POTENTIAL SOURCES OF CONTAMINATION)

Site history *(historical land use taken within 250m radius of the Site boundary)*

Date	Description of land use
1866	Site is developed with a small structure in the west of the Site, three small structures towards the centre of the Site and a small structure close to the northern boundary on-Site. Part of a larger building crosses over the south eastern corner of the Site at this time. The surrounding land use is predominantly residential.
1895	The small structure in the west of the Site is no longer mapped at this time. A small rectangular structure is now located close to the western boundary on-Site. The land c.130 m to the south west is now developed with three large industrial/commercial buildings.
1935	No change on-Site. The industrial/commercial buildings to the south west of the Site are no longer present and the land is developed for residential use. The land adjacent to the eastern boundary is developed with a long narrow structure. The area c.90 m to the south west is developed as a laundry.
1938	No apparent change. However, detailed observations are not possible given the scale of mapping available.
1964	Site is now predominantly unoccupied land. All previously mentioned structures are no longer present. Three small structures are now located in the northern area of the Site, close to the boundary, one further small structure is located against the western boundary on-Site. Works are located c. 30m north west and c. 45 m north of the Site. The land c.65 m south west of the Site is now labelled as a garage. The laundry to the south west of the Site has extended to the east and is now c.75 m from Site. The land c. 130 m south west and c.225 m south east are now mapped as "Works". An area c.230 m to the south east is now mapped as a depot.
1975	Site is now occupied by one large rectangular structure to the south. No change to the surrounding area.
1985	Site is now labelled as Western House. The previously mentioned works to the north of the Site is now labelled as a joinery works. Anecdotal evidence suggests the ground floor of the building on-Site was used as a workshop (fabric/textile workshop).
1992	No change on-Site. The land c.80 m to the south is now labelled as a works.
2002	No change on-Site or to the surrounding area.
2013	Aerial imagery shows no change on-Site or to the surrounding area.

POTENTIAL **SOURCES** OF CONTAMINATION

Source description

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

Miscellaneous small scale fuel or chemical spills associated with ad hoc residential, commercial or general land management activities.

Made Ground associated with former development/demolition activities.

Given the age of the current on-Site structures it is possible that asbestos containing material (ACM) has been used during their construction/refurbishment. It is therefore possible that ACMs are present within the sub-surface of the Site as well as within the building structures themselves.

LOW LIKELI-HOOD

PROBABILITY OF CONTAMINATION

2.2 Conceptual Understanding (POTENTIAL SOURCES OF CONTAMINATION)

Current land use	The Site is currently disused office accommodation. There are no known buried storage tanks at the Site. There is no known bulk fuel or chemical storage on Site. Additional information concerning the current Site condition is presented in Section 2.5 (site walkover information).	POTENTIAL **SOURCES** OF CONTAMINATION	The Site's current use is unlikely to have given rise to significant land contamination. As such, no potential for gross contamination (i.e., bulk fuels, chemicals, ground gases, etc.) has been identified in relation to the current use of the Site.	UNLIKELY	**PROBABILITY** OF CONTAMINATION
Neighbouring land uses *(see environmental data report in Section 3.3 for full listing)*	One or more potentially contaminative land uses are located within the vicinity of the Site, including: Electricity substations c.60 m south west, c.215 m south east and c.235 m north. Works c.95 m south – unspecified works or factories ATS Euromaster Ltd c.140 m north west - vehicle parts and accessories Tapecity c.160 m west - electronic equipment Sign A Rama c.165 m west - signs The Co-Op Lees Corner c. 245 m north west - petrol and fuel station		The potentially contaminative land uses/activities identified in close vicinity of the Site may pose a contamination hazard to the Site should relevant contaminant pathways exist.	LOW LIKELI-HOOD	

Nr	Nearest distance	Land use / permitted activity / authorisation
2	c.40 m	Petrol or fuel sites
0	NA	High pressure oil or gas pipelines
0	NA	Records of IPC or IPPC Authorised Activities
0	NA	Red List / List 1 / List 2 Dangerous Substance Inventory Sites
2	c.235 m	Part A(2) and Part B Activities and Enforcements
0	NA	Records of Category 3 or 4 Radioactive Substance Licences
0	NA	Records of Licensed Discharge Consents.
0	NA	COMAH and NIHHS registered sites
0	NA	Sites determined as Contaminated Land under Part IIA of the Environmental Protection Act 1990

2.2 Conceptual Understanding (POTENTIAL SOURCES OF CONTAMINATION)					
EA recorded pollution incidents	No Environment Agency pollution incidents have been recorded within 250 m of the Site.	POTENTIAL **SOURCES** OF CONTAMINATION	No potential for gross contamination has been identified in relation to any pollution incidents occurring near to the Site.	NO RISK	**PROBABILITY** OF CONTAMINATION
Landfills / waste sites *(taken within 500m radius of the Site boundary, see environmental data report in Section 3.3 for full listing)*	There are no Environment Agency listed historical landfills located within 500 m of the Site. There are no Environment Agency listed operational landfills located within 500 m of the Site. There are no Local Authority listed historical landfills located within 500 m of the Site. The following other waste sites are registered within 500 m of the Site: 0 Records of operational waste treatment, transfer or disposal sites. 1 Records of non-operational waste treatment, transfer or disposal sites. 0 Records of Environment Agency waste sites.		Given the absence of any historical or operational landfills within close proximity of the Site no associated contamination hazards have been identified. The nearby waste management site(s) is not thought to represent a significant source of contamination which may impact on the Site given the relative distance to the Site.	UNLIKELY	
Radon	According to current UK radon mapping (Public Health England, 2015) the Site lies in an area where 0 to 1 % of homes are at or above the UK radon action level (200 Bq/m3).		0 to 1 % of homes are at or above the UK radon action level (200 Bq/m3).	UNLIKELY	

2.3 Conceptual Understanding (ENVIRONMENTAL SENSITIVITY / POTENTIAL SEVERITY OF IMPACTS)					
Geology and Groundwater (see the environmental data report in Section 3.3 for full details)	British Geological Survey mapping indicates that the underlying superficial geology consists of Boyn Hill Gravel Member which comprises sand and gravel and is classified as a Secondary (A) Aquifer. 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. The Site lies within a 'potential for groundwater flooding to occur at surface' groundwater flood risk susceptibility area based on the underlying geological conditions. The British Geological Survey confidence rating for this susceptibility classification is 'moderate '. There are no Source Protection Zones (SPZs) within 500 m of the Site. The following groundwater abstraction licences are held within 1 km of the Site: Two abstractions for laundry use are located c.110 m west and c.125 m west of the Site. One spray irrigation abstraction is located c.615 m south of the Site. One drinking (potable), cooking, sanitary and washing abstraction is located c.985 m west of the Site.	POTENTIAL **RECEPTORS**	A Secondary (A) Aquifer comprises permeable layers capable of supporting water supply at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. Unproductive Strata typically have low permeability and offer negligible water supply or river base flow potential. Based on the susceptibility of the Site to groundwater flooding, a groundwater flood risk assessment should be considered for the Site. The depth to groundwater beneath the Site is unknown. The presence of one or more groundwater abstraction licences within close proximity of the Site indicates a reasonable groundwater resource potential.	**MEDIUM**	**POTENTIAL SEVERITY** OF IMPACT
Geohazards	The Site does not lie within a 'Coal Mining Reporting Area'. There are no brine affected areas within 75 m of the Site. Artificial ground / Made Ground is anticipated on Site. There are no natural hazards at or within 50 m of the Site.		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. The Site does not lie within an area of former brine working and is therefore unlikely to be affected by related ground stability issues.	**NO RISK**	

2.3 Conceptual Understanding (ENVIRONMENTAL SENSITIVITY / POTENTIAL SEVERITY OF IMPACTS)					
Surface water *(see the environmental data report in Section 3.3 for full details)*	There are no significant surface water features within 250 m of the Site. The Site does not lie within a flood risk zone. There are no surface water abstraction licences within 1 km of the Site.	POTENTIAL RECEPTORS	No relevant surface water receptors have been identified.	NO RISK	POTENTIAL SEVERITY OF IMPACT
Environmental designations *(see the environmental data report in Section 3.3 for full details)*	The following environmentally sensitive areas are present within 500 m of the Site: London Area Greenbelt is 240m to the east.		Given the distance from the Site and the nature of the local geology, the sensitivity of local environmental designations is judged to be low. It is also noted that the severity of any impact to greenbelt land would be reduced in comparison to other environmentally sensitive sites (e.g. SSSI, NNR, SAC etc.)	MINOR	
Human receptors	Proposed residents/users of the Site plus neighbouring residences.		Human receptors are proposed to be present on Site.	SEVERE	

2.4 Regulator Perspective		
Consultation date	15/06/15	London Borough of Hillingdon Council
Envirep consultant	Johnathan Green	Mick Brough
Consultation outcome	On enquiry, the Council informed Envirep that their main concern related to the change of use of the Site to a more sensitive end use (residential). The Site is not noted to have any specific contaminative use according to Council mapping. The Council notes that a clean up occurred at a former wood yard to enable redevelopment for residential use nearby on Star Road. The only potential issue the Council are aware of in the neighbouring vicinity is the closure of the petrol station across the road, however it is not thought to have affected any nearby properties. This petrol station was the Esso Hilingdon Service Station which now forms part of the Blue Dragon Laundry as an extension. Arcadis and URS carried out work at this site, and the closure / validation report was by URS dated 1 July 2005.	

2.5 Site Inspection (see photographs in Section 3.2)			
Inspection date	10/06/2015	**General site condition**	Good
Envirep consultant	Edward Evans	**Site contact (position)**	B.S.Gill (Owner)
Topography	Flat and level with the road.	**Ground cover**	100% hard standing
Current site land use	Unoccupied office premises.	**On-Site structures**	A large two storey building occupies the southern part of the Site. The building is in a good usable condition and is constructed with a steel frame with timber and concrete flooring. The ground floor is empty and was previously a workshop. Two detached brick garages are located to the north of the large office building. The roof on one of these was previously made from asbestos, which is now replaced with fibreglass panels. Both garages appeared in good condition and anecdotal information suggests that they are empty.
Visual / olfactory evidence of contamination	No visual or olfactory evidence of any on site contamination was observed during the site walkover	**On site drainage**	A surface water drain is located to the north of the Site (car park area). Other drainage on-Site is standard waste water drainage related to office premises.
Bulk storage tanks (fuel and chemical storage)	No direct evidence of any bulk fuel or chemical storage was observed during the site walkover	**Invasive species**	Vegetation is present along the boundary to the rear of the Site. The vegetation may consist of invasive species although this is not confirmed.

2.5 Site Inspection (see photographs in Section 3.2)				
Neighbouring land uses	North	Semi-detached residential property with garden.	**Off-site contaminant sources**	No visual or olfactory evidence of any off site contamination was observed during the site walkover
	South	Main road with Blue Dragon Dry Cleaners to the south west of the road.		
	East	Construction site where a public house has been previously demolished.		
	West	Commercial property with residential flats above.		
Local water features	No evidence of any surface water features was observed within the immediate vicinity of the site during the site walkover		**Distance to nearest residential property**	The nearest residential accommodation is currently located c.10 m to the north of the site boundary
Comments				

2.6 PRELIMINARY RISK ASSESSMENT

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
On Site sources								
1	Potential for **inorganic** and low volatility organic contaminants to be present within the sub-surface **soils**	Dermal contact, soil & soil dust ingestion, inhalation of soil dust	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	Given the assumed presence of Made Ground beneath the Site any residual contamination associated with this material has the potential to impact on future site users. However, given that the development plans do not include any areas of soft landscaping, no routine exposure to any sub-surface contamination is considered likely.
2		Consumption of home grown produce	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	
3		Ingress into water supply pipework and subsequent water ingestion	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	
4		Building materials in direct contact with aggressive ground	PROP	Current/future site buildings	MEDIUM	UNLIKELY	LOW RISK	
5		Dissolution into pore water/shallow groundwater and subsequent migration	GW	Boyn Hill Gravel Member (a Secondary (A) Aquifer)	MEDIUM	LOW LIKELIHOOD	MODERATE/LOW RISK	The risk classification reflects the local groundwater sensitivity (reasonable resource value).
6		Dissolution into pore water/shallow groundwater and subsequent migration	GW	London Clay Formation (an Unproductive Strata)	MILD	UNLIKELY	VERY LOW RISK	
7		Dissolution into pore water/shallow groundwater and subsequent lateral migration	ECO	London Area Greenbelt	MINOR	UNLIKELY	VERY LOW RISK	The risk classification reflects the reasonable distance to the ecological receptor

2.6 PRELIMINARY RISK ASSESSMENT

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
8	Potential for **volatile organic** contaminants to be present within the sub-surface **soils**	Dermal contact, ingestion & inhalation of soils & soil dust	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	Given the assumed presence of Made Ground beneath the Site any residual contamination associated with this material has the potential to impact on future site users. However, given the development plans (which do not include any areas of soft landscaping) no routine exposure to any sub surface contamination is considered likely.
9		Consumption of home grown produce	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	
10		Ingress into water supply pipework and subsequent water ingestion	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	
11		Migration of vapours to surface; inhalation indoors	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	It is plausible that the source mass associated with any volatile contaminants that were originally present on-Site may have been significantly reduced due to the effects of volatilisation and degradation
12		Migration of vapours to surface; inhalation outdoors	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	
13		Building materials in direct contact with aggressive ground	PROP	Current/future site buildings	MEDIUM	UNLIKELY	LOW RISK	Aggressive ground are not anticipated on-Site
14		Dissolution into pore water/shallow groundwater and subsequent migration	GW	Boyn Hill Gravel Member (a Secondary (A) Aquifer)	MEDIUM	LOW LIKELIHOOD	MODERATE/LOW RISK	The risk classification reflects the local groundwater sensitivity (reasonable resource value).
15		Dissolution into pore water/shallow groundwater and subsequent migration	GW	London Clay Formation (an Unproductive Strata)	MILD	UNLIKELY	VERY LOW RISK	
16		Dissolution into pore water/shallow groundwater and subsequent lateral migration	ECO	London Area Greenbelt	MINOR	UNLIKELY	VERY LOW RISK	The risk classification reflects the reasonable distance to the ecological receptor.

2.6	PRELIMINARY RISK ASSESSMENT							
Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
17	Potential for **asbestos** containing materials within the sub-surface **soils**	Liberation of sub surface ACMs and inhalation of asbestos fibres	HH	Occupants of on site buildings	MEDIUM	UNLIKELY	LOW RISK	Given the age of the existing building structures asbestos containing material may be present within the building fabric and surrounding sub soils. However, the proposed presence of hard standing across the entire Site, no routine exposure to any sub-surface contamination is considered likely.
18	Potential for **dissolved phase** contaminants to be present within **shallow groundwater**	Lateral and vertical groundwater movement via natural or artificial flow paths	GW	Boyn Hill Gravel Member (a Secondary (A) Aquifer)	MEDIUM	LOW LIKELIHOOD	MODERATE/LOW RISK	The risk classification reflects the local groundwater sensitivity (reasonable resource value).
19		Lateral and vertical groundwater movement via natural or artificial flow paths	GW	London Clay Formation (an Unproductive Strata)	MILD	UNLIKELY	VERY LOW RISK	
20		Lateral and vertical groundwater movement via natural or artificial flow paths	ECO	London Area Greenbelt	MINOR	UNLIKELY	VERY LOW RISK	The risk classification reflects the reasonable distance to the ecological receptor.
21	Potential for elevated **methane** 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	MEDIUM	UNLIKELY	LOW RISK	Based on the prevailing conceptual understanding an appreciable gas source is considered unlikely
22		Lateral migration towards off site buildings; potential to cause an explosion	HH	Off site properties and their occupants	MEDIUM	UNLIKELY	LOW RISK	
23	Potential for elevated **carbon dioxide** to be present within the sub-surface **soils**	Lateral and vertical migration into on site buildings; potential to cause asphyxiation	HH	Occupants of on site buildings	MEDIUM	UNLIKELY	LOW RISK	
24		Lateral migration towards off site buildings; potential to cause asphyxiation	HH	Occupants of off site buildings	MEDIUM	UNLIKELY	LOW RISK	
25	Potential for **radon** within the sub-surface	Lateral migration towards on site buildings; potential to cause long term health effects	HH	Occupants of onsite buildings	MEDIUM	UNLIKELY	LOW RISK	The Site lies in an area where 0 to 1 % of homes are at or above the UK radon action level (200 Bq/m3).
						OVERALL RISK RATING	MODERATE/LOW RISK	

2.6 PRELIMINARY RISK ASSESSMENT

Nr	Sources	Pathways	TYPE	Receptors	Consequence	Probability	Risk classification	Comments
Off Site sources								
26	Potential for **volatile organic** contaminants to be present within the sub-surface **soils** associated with the neighbouring **petrol filling station/laundry**	Migration of vapours to surface; inhalation indoors	HH	Current/future site occupants	MEDIUM	UNLIKELY	LOW RISK	Based on local authority consultation, neighbouring properties to these identified potential off-site sources are thought to be unaffected. As such, sub surface contamination on-Site in relation to these sources is considered to be unlikely.
27		Dissolution into pore water/shallow groundwater and subsequent migration	GW	Boyn Hill Gravel Member (a Secondary (A) Aquifer)	MEDIUM	UNLIKELY	LOW RISK	
28	Potential for **dissolved** phase contaminants to be present within **shallow groundwater** associated with the neighbouring **petrol filling station/laundry**	Lateral and vertical groundwater movement via natural or artificial flow paths	GW	Boyn Hill Gravel Member (a Secondary (A) Aquifer)	MEDIUM	UNLIKELY	LOW RISK	
						OVERALL RISK RATING	LOW RISK	

2.7	Recommendations for Next Steps		
✓	**No immediate action but observe a watching brief**	envirep .co.uk environmental report specialists	Given the known history of the Site and development plan proposed it is considered unlikely that significant contamination is present within the sub-surface or that exposure to any potential contamination will occur. The preliminary risk assessment suggests that the risks posed by in situ land quality are therefore likely to be **low/moderate.** The preliminary risk assessment also suggests that the risks posed by off-Site land quality are likely to be **low.** 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. 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 any potential contamination and formulate an appropriate investigation and remediation plan, as necessary.

3. SUPPORTING INFORMATION

The following supporting information is contained in this section:

Section	Content
3.1	Referenced materials used in the Phase 1 reporting
3.2	Site photographs
3.3	Published environmental data records (Centremaps EnviroInsight report Transport House, Uxbridge Road, Hillingdon, Uxbridge, UB10 0LY. REF: CMAPS-CM-436450-34722-090615EDR) including: • Aerial photographs and site map • Environmental permits, incidents and registers • Landfill and other waste sites • Current land use information • Geology • Hydrogeology and hydrology • Flooding • Designated environmentally sensitive sites • Other environmental factors
3.4	Risk assessment methodology
3.5	Historical land use maps

3. SUPPORTING INFORMATION

3.1 References

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

British Standards Institute, 2011. Investigation of potentially contaminated sites – code of practice. ISO 10175:2011.

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

Groundsure, 2015. Centremaps EnviroInsight report Transport House, Uxbridge Road, Hillingdon, Uxbridge, UB10 0LY. REF: CMAPS-CM-436450-34722-090615EDR

Environment Agency, 2015. What's in my backyard? (http://www.environment-agency.gov.uk/homeandleisure/37793.aspx).

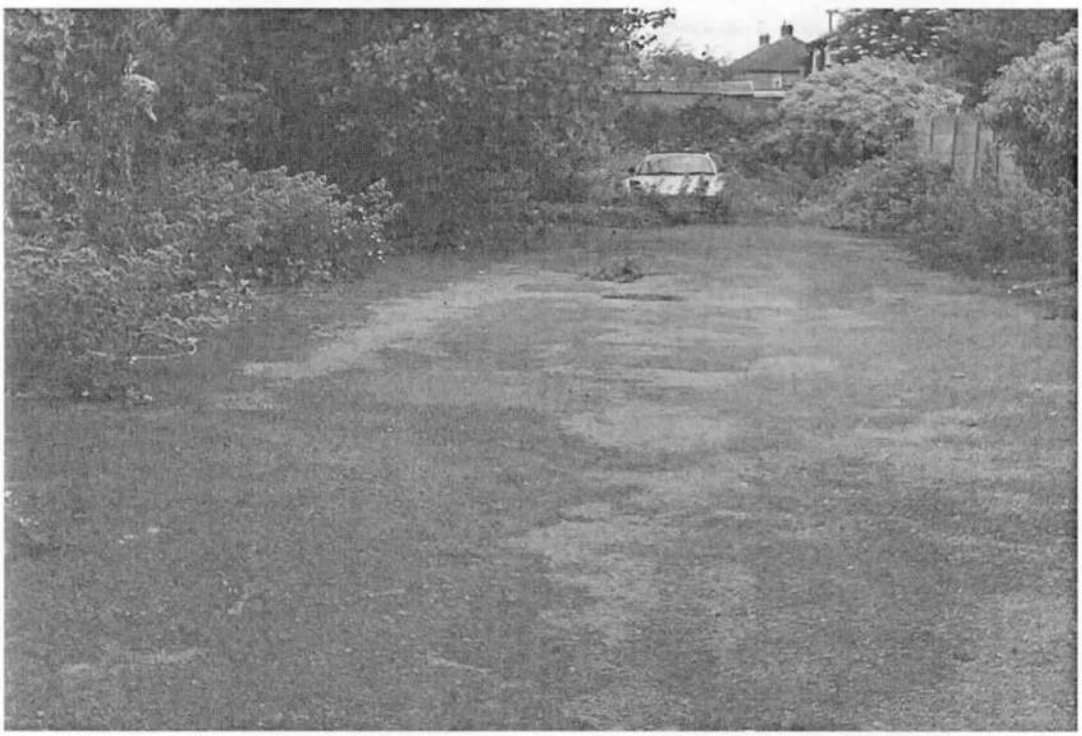
Health Protection Agency, 2000. Spring 2000 Newsletter featuring; Radon: Guidance on Protective Measures for New Dwellings (BR 211).

Public Health England, 2015. Interactive Radon Map (http://www.ukradon.org/information/ukmaps/englandwales).

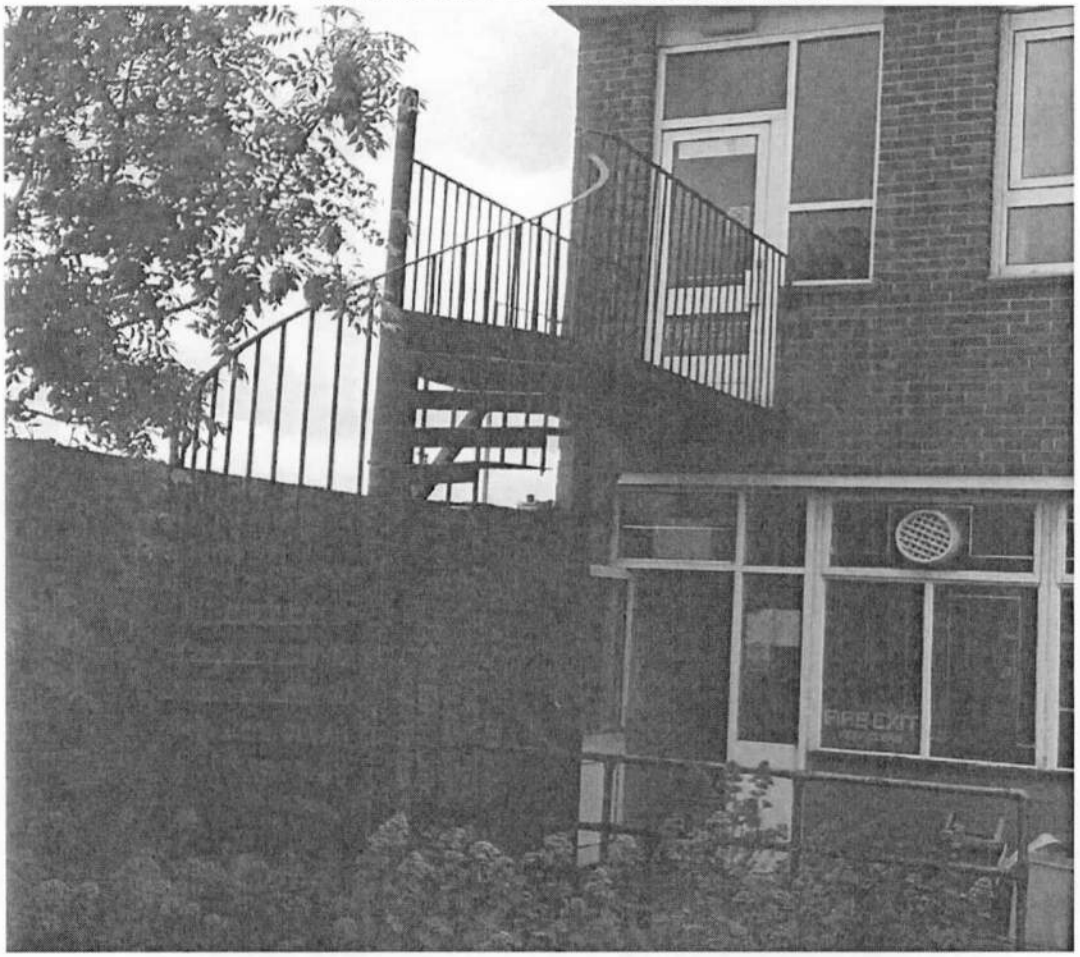
3.2 Site Photographs

Photograph 1: The access road to the rear of the office building, facing north west.

Photograph 2: The car park to the rear of the office building, facing north east.

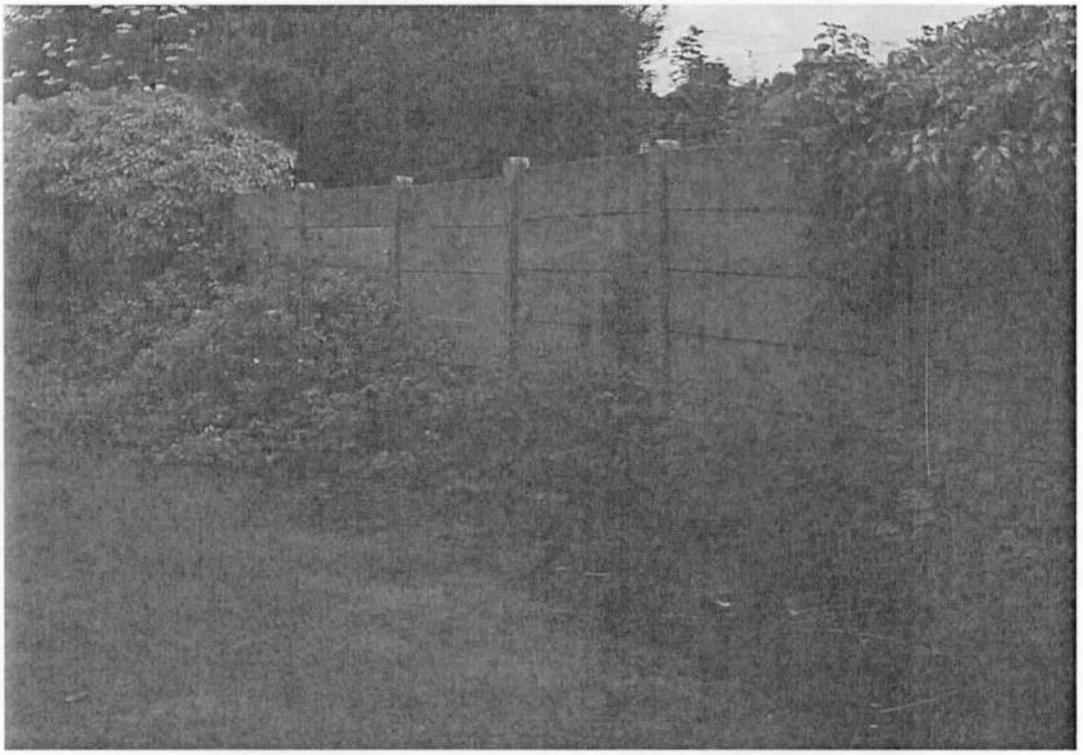


Photograph 3: View south at the rear of the office building.



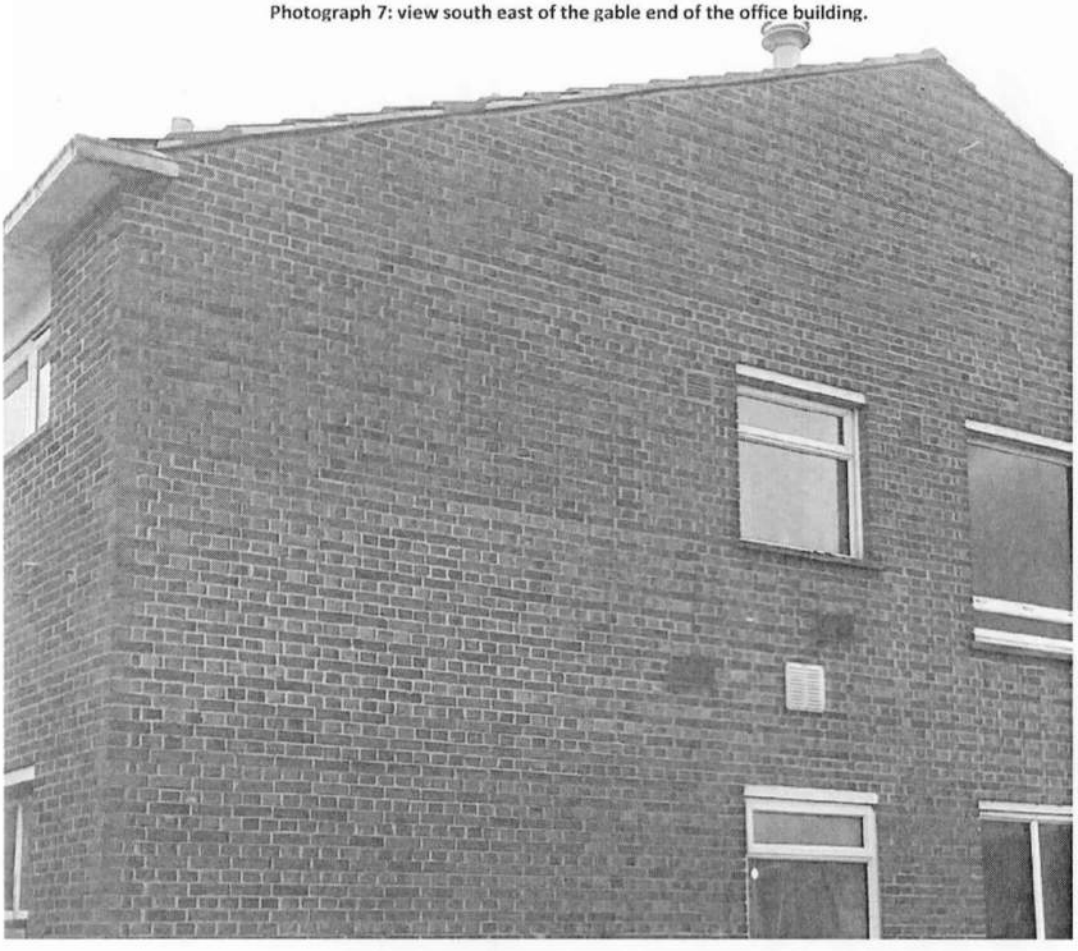
Photograph 4: View north west of the front of the office building.

Photograph 5: View of the north west boundary of the Site.



Photograph 6: A surface water drain located in the centre of the car park

Photograph 7: view south east of the gable end of the office building.



Photograph 8: The interior of the office building.

Photograph 9: Roofing of garage on-Site