

PHASE I DESK STUDY AND PRELIMINARY RISK ASSESSMENT
High Peak, Barkway, Hertfordshire, SG8 8EY

Project Reference:
CON71-BARK-001

Site Address:
High Peak
Barkway
Hertfordshire
SG8 8EY

Report Date:
5 September 2017

Version Number:
Version 1

Customer:
Laurel Developments

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Publication Title	Phase I Desk Study and Preliminary Risk Assessment High Peak, Barkway, Hertfordshire, SG8 8EY
Volume Number	Volume 1 of 1
Version	1
Date	5 September 2017
Project Reference	CON71-BARK-001

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Issue Status	Version 1
Date	5 September 2017

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EXECUTIVE SUMMARY

Stansted Environmental Services Ltd has been commissioned by Laurel Developments, to undertake a Phase I Preliminary Risk Assessment (PRA) of a study site located at High Peak, Barkway, Hertfordshire, SG8 8EY. It is the intention for the site to be redeveloped to provide two detached residential dwellings with car parking and private gardens. The site may be located by National Grid Reference TL 384347.

At the time of the walkover, the site was a residential home and gardens comprising a single residential dwelling, known as High Peak, with the majority of site covered by lawn, flower beds and small wooded areas. A garage and tarmac hardstanding was situated to the North. The site is predominately flat and does not have undulating topography.

The site appears to have been undeveloped until the 1940s/50s when the site was part of the garden to High Peak. The majority of the site has remained undeveloped. The surrounding area has generally become developed since the 1940s; predominantly with residential developments. A garage/petrol filling station was constructed in the late 1970s some 40m northwest of the site.

The site is underlain by the superficial deposits of the Lowestoft Formation (chalky till) overlying the Lewes Nodular Chalk and Seaford Chalk (undifferentiated) Formation. The Lowestoft Formation has been identified as a Secondary (undifferentiated) Aquifer while the underlying chalk has been classified as a Principal Aquifer by the Environment Agency.

The closest surface water feature is the River Quin about 282m East of the site.

The research has identified evidence of potential geohazards associated with the underlying ground conditions, either natural or man-made, and, therefore, it is recommended that further work be carried out to confirm the presence, nature or extent of those hazards anticipated to impact on the site.

The research has not identified any potential sources of contamination onsite. However, the garage to the northwest may be a source with fuels oils migrating to the site.

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1. INTRODUCTION

1.1 General

Stansted Environmental Services Ltd has been commissioned by Laurel Developments, to undertake a Phase I Desk Study and Preliminary Risk Assessment (PRA) of a study site located at High Peak, Barkway, Royston, SG8 8EY.

The purpose of the study was to evaluate the contamination status at the site and to develop a risk assessment based on the past uses of the site and the proposed end use.

Assessment of the risks that may be associated with potentially contaminated land are generally undertaken on a phased or tiered basis, in accordance with current UK policy and technical guidance given in Contaminated Land Publication CLR11 "Model Procedures for the Management of Land Contamination" (2004) and British Standard BS10175 "Investigation of Potentially Contaminated Sites – Code of Practice" (A1:2013) as well as other relevant documents. The relevant phases of risk assessment are as follows:

- Development of a Conceptual Model that identifies potential source-pathway-receptor linkages (pollutant linkages) based initially on a consideration of desk-based and site reconnaissance information on the characteristics of the site and its environmental setting;
- Risk estimation and evaluation using generic assessment criteria. This allows refinement of the Conceptual Model on the basis of factual information on the condition of the land (site investigation data) and involves comparison between observed concentrations of contaminants in environmental media against relevant and applicable generic assessment (or screening) criteria; and
- Risk estimation and evaluation using site specific assessment criteria. This involves further refinement of the Conceptual Model on the basis of more detailed, site specific information on the condition of the land, and the use of relevant and applicable exposure models and site specific assumptions to estimate risks.

The Preliminary Risk Assessment is a qualitative judgement about the potential human health and environmental risks that may be associated with a site, and represents the first of the three phases outlined above.

This PRA report is based upon a defined programme of work and terms and conditions agreed with the Client. In preparing this report, all reasonable skill and care has been taken, accounting for project objectives, agreed scope of work and prevailing site conditions. SES accepts no liability to any parties whatsoever, following the issue of this report, for any matters arising outside the agreed scope of the work. It should be noted that this report is issued in confidence to the Client and that SES has no responsibility to any third parties to whom this report may be circulated, in part or in full, and any such parties cannot rely on the contents of the report. Unless specifically assigned or transferred within the terms of the agreement, SES asserts and retains all Copyright, and other Intellectual Property Rights, in and over the report and its contents.

1.2 Planning Status

The proposed scheme, covered by North Herts District Council Planning Permission 17/00678/1, is for the construction of two detached dwellings with associated gardens and car parking. The proposed site layout is shown in Appendix A.

This desktop study was produced to assist in the discharge of Planning Condition 11 relating to Land Contamination, which has been reproduced below:

(a) No development approved by this permission shall be commenced prior to the submission to, and agreement of the Local Planning Authority of a written preliminary environmental risk assessment (Phase I) report containing a Conceptual Site Model that indicates sources, pathways and receptors. It should identify the current and past land uses of this site (and adjacent sites) with view to determining the presence of contamination likely to be harmful to human health and the built and natural environment.
(b) If the Local Planning Authority is of the opinion that the report which discharges condition (a), above, indicates a reasonable likelihood of harmful contamination then no development approved by this permission shall be commenced until a Site Investigation (Phase II environmental risk assessment) report has been submitted to and approved by the Local Planning Authority which includes:

- *A full identification of the location and concentration of all pollutants on this site and the presence of relevant receptors, and;*
- *The results from the application of an appropriate risk assessment methodology*

(c) No development approved by this permission (other than that necessary for the discharge of this condition) shall be commenced until a Remediation Method Statement report; if required as a result of (b), above; has been submitted to and approved by the Local Planning Authority.
(d) This site shall not be occupied, or brought into use, until:

- *All works which form part of the Remediation Method Statement report pursuant to the discharge of condition (c) above have been fully completed and if required a formal agreement is submitted that commits to ongoing monitoring and/or maintenance of the remediation scheme.*
- *A Remediation Verification Report confirming that the site is suitable for use has been submitted to, and agreed by, the Local Planning Authority.*

(e) Any contamination, other than that reported by virtue of condition (a) and (b), encountered during the development of this site shall be brought to the attention of the Local Planning Authority as soon as practically possible; a scheme to render this contamination harmless shall be submitted to and agreed by, the Local Planning Authority and subsequently fully implemented prior to the occupation of this site.

Reason: To ensure that any contamination affecting the site is dealt with in a manner that safeguards human health, the built and natural environment and controlled waters.

1.3 Project Objectives

The objectives of this study were to:

- Establish the historical and current uses of the subject site and adjacent land, including any areas located within a 500m radius of the subject site that have been used for landfill disposal purposes;
- Determine the environmental setting of the land as characterised by:

  i. Geology;
  ii. Hydrogeology;
  iii. Hydrology;
  iv. Licensed waste management activities;
  v. Pollution controls and authorisations;
  vi. Historical pollution incidents;
  vii. Radon hazards; and
  viii. Ecosystem designations.

- Comment on the potential for contamination of the soil and water environment in contact with the subject site, arising from the use of the site or surrounding land for particular purposes or as the result of other factors; and

- Identify the potential human health and environmental risks that may be associated with the subject site, taking into account past, current and planned future uses of the land and its environmental setting.

2. SOURCES OF INFORMATION

In preparing this report, SES has relied upon the sources of information set out below:

TABLE 1: Sources of Information

Report Ref	Document Ref	Prepared by
1	EnviroCheck Report (Ref: 135250660_1_1) comprising: • The Envirocheck Main Legend Maps • Ordnance Survey Historical Maps • The EnviroCheck Report • The EnviroCheck Flood Map • The EnviroCheck Groundwater Vulnerability Map • The EnviroCheck Sensitive Land Uses Map	Landmark Information Group
2	Geology of Britain Viewer	British Geological Survey
3	Aquifer designation data available via the EA website	Environment Agency
4	Site reconnaissance carried out on 25/08/2017	George Booth, SES

3. SITE DESCRIPTION AND SETTING

3.1 Site Location

The site is located at High Peak, Barkway, Hertfordshire, SG8 8EY and is approximated by the National Grid reference TL 384347. The site location is shown in Figure 1.

FIGURE 1: Site Location



3.2 Site Description

The proposed development site is rectangular in shape and covers an area of approximately 0.10 hectares. The site is bounded by residential dwellings, paddock and commercial premises.

3.3 Walkover Survey

The walkover survey was undertaken on 25th August 2017 by George Booth, Assistant Environmental Consultant from SES.

The site is currently in use as a residential home and gardens, known as High Peak, with the majority of site is covered by lawn, flower beds and small wooded areas. A garage and tarmac hardstanding was situated to the immediate East. The site is predominately flat and does not have undulating topography. A well was present to the South of the dwelling.

4. HISTORICAL MAP SURVEY

4.1 Maps

A review of relevant historical maps for the area surrounding the subject site has been undertaken and is summarised below. The historical maps are included in this report within Appendix D.

TABLE 2: Historical Maps

Map, Date & Scale	On-Site	Off-Site
Hertfordshire 1876 - 1878 1:2500 1883 1:10560	The site is shown as part of a field. A road is shown running along the Western boundary.	The surrounding area comprises fields. A gasworks (disused) is shown about 200m North of the site while a tank and a well are present about 225m Northeast of the site. The village of Barkway is shown about 700m north of the site.
Hertfordshire 1898 1:2500 1899 1:10560	No significant changes to the site.	There has been some development to the North of the site with the edge of the village of Barkway now about 250m North of the site. The gasworks are no longer indicated.
Hertfordshire 1921 1:10560 Essex 1924 1:10560	No significant changes to the site or surrounding area.	
Essex 1950 1:10560	A structure is shown adjacent to the North of the site.	A number of structures have appeared around the site.
Ordnance Survey 1960 1:10000	No significant changes to the site or surrounding area.	
Ordnance Survey 1976 - 1977 1:2500	The site is shown to be part of the garden to High Peak.	A garage is present about 50m to the West of the site while a sewage works is shown about 250m to the Northeast. The village of Barkway has grown predominantly with residential development. Some further development has occurred to the West and Southwest. Howlet's Farm and Poultry Farm are shown about 125m and 250m to the Northeast and Northwest respectively.
Ordnance Survey 1982 – 1984 1:10000	No significant changes to the site or surrounding area.	
Ordnance Survey 1993 1:2500	No significant changes to the site or surrounding area.	
Ordnance Survey Raster Mapping 1999 1:10000	No apparent changes to the site or surrounding area.	
Historical Aerial Photography	No apparent changes to the site or surrounding area.	

Map, Date & Scale	On-Site	Off-Site
2000		
Ordnance Survey Raster Mapping 2006 1:10000	No apparent changes to the site or surrounding area.	
Ordnance Survey VectorMap Local 2017 1:10000	The map shows the site and surrounding area to be generally in agreement with its current setting.	

4.2 Planning History

Stansted Environmental Services searched the planning records held by North Herts District Council. A number of planning applications have been approved for properties in the vicinity of the site predominantly for construction of extensions/new dwellings within gardens.

There is a planning application (dated 29/06/1979) for the use of land for caravan and used car sales, caravan repairs, petrol sales, shop, car parking, landscaping and security fencing for Southern End Garage, London Road, Royston, SG8 8EY (Barkway Service Station). This was further extended in 1981 for a further vehicle repair and service workshop in 1981.

4.3 Summary of Site History

The site appears to have been undeveloped until the 1940s/50s when the site was part of the garden to High Peak. The majority of the site has remained undeveloped.

The surrounding area has generally become developed since the 1940s; predominantly with residential developments. A garage/petrol filling station was constructed in the late 1970s some 40m northwest of the site.

5. ENVIRONMENTAL SETTING

5.1 General

Data contained within the Envirocheck report has been used to assess the environmental setting of the site. The relevant data is presented in Appendix E.

5.2 Geology

Reference to the British Geological Survey website (www.bgs.ac.uk) indicates that the site is underlain by the Lewes Nodular Chalk and Seaford Chalk (undifferentiated) Formation.

Superficial deposits are represented by the Lowestoft Formation (chalky till).

5.3 Hydrogeology

The Lowestoft Formation has been identified as a Secondary (undifferentiated) Aquifer, corresponding to granular layers, while the underlying Lewes Nodular Chalk/Seaford Chalk Formation has been classified as a Principal Aquifer Strata by the Environment Agency. The site is shown within a Groundwater Source Protection Zone III (Total Catchment).

A well onsite was dipped with groundwater found to be in excess of 25m bgl.

There are no licensed groundwater abstractions located within 500m of the study. There is a single licensed discharge to land within 500m; this being 466m Northeast for sewage discharge into land (soakaway).

5.4 Hydrology

The closest surface water feature is the River Quin a small river/stream which flows southwards about 282m to the East of the site.

There are no licensed surface water abstractions within 500m of the study site. There are eight discharge consents to surface waters within 500m; the closest being for Barkway Wastewater Treatment Works operated by Thames Water Utilities Limited and situated about 249m Northeast of the site.

5.5 Radon

The British Geological Survey, in conjunction with the Radiation Protection Division of the Health Protection Agency, indicates the site to lie within an area where there is a probability of <1% of present or future homes being above action the level of 200Bq/m^3. As such, the site is not classified as a Radon Affected Area. Therefore, no radon protection measures are deemed necessary for the proposed development. This is confirmed by the Building Research Establishment Report BR211.

5.6 Soil Geochemistry

The British Geological Survey data indicates the following concentrations of naturally occurring metals to be representative of background levels in natural soil underlying the site. The levels are based on those present in rural soils and are not necessarily representative of levels within Made Ground which may be encountered on-site.

TABLE 3: Soil Geochemistry

Element	Concentration mg/kg
Arsenic	15 – 25
Cadmium	<1.8
Chromium	60 – 90
Lead	<100
Nickel	30 - 45

6. ASSESSMENT OF GEOTECHNICAL RISK

6.1 Geological Constraints

The following are brief findings relating to factors identified during the research from the EnviroCheck data that may have a potential impact upon the engineering of the proposed design.

TABLE 4: Geohazards

Potential Hazard	Assessed Risk	Comment
BGS Recorded Mineral Sites	None	
Man-Made or Natural Cavities	Very Low	The site is underlain by the Lowestoft Formation with the London Clay Formation at depth. No cavities have been recorded within 1km of the site.
Collapsible Ground	Very Low	Collapsible material may be present. Such material is prone to collapse when it is loaded (as by constriction of a building) and then saturated by water (as by rising groundwater). Collapse may cause considerable damage to overlying property.
Compressible Ground	Very Low	No post-glacial soils are recorded as being present on the site.
Ground Dissolution	Very Low	The site is underlain by the Lowestoft Formation.
Landslide	Very Low	The site is essentially level.
Running Sand	Very Low	Granular deposits are not indicated to be present at shallow depth within the site area.
Shrinking or Swelling Clay	Low	The Lowestoft Formation is a cohesive deposit and is likely to have a low to moderate volume change potential.
Unconsolidated Made Ground	Low	Made Ground is not thought to be present on site.
Bearing Pressure	Low	Weak soils in the form of Made Ground are not anticipated at shallow depth.
Aggressive Conditions for Construction Materials	Very Low	The geology on site is not thought to contain high levels of sulphates and sulphides, and therefore, has been assigned a very low risk.
Shallow or High Groundwater Table	Very Low	The well on site indicates a water level >22m bgl
Old Basements	Very	There has been no development on site.

6.2 Geotechnical Risk Assessment

An assessment of the main hazards associated with the site is detailed below. Unless stated otherwise, the presence of such hazards are based on information from the research or reconnaissance and have not been confirmed by an intrusive investigation.

- Soil Conditions

  The presence of plastic cohesive soils represents a risk to structures. Volume changes brought about by shrinkage and swelling of the cohesive soil, exacerbated by the presence of trees, could result in structures supported on this stratum experiencing differential settlement. The associated risk is considered to be low to moderate, and may result in either deeper trench fill foundations or even piled foundations being employed.

- Topography

  The EnviroCheck data provided indicates only a very low risk of landslip subsidence.

- Previous Use

  Historical Mapping has not indicated any previous development on the site. Therefore, the presence of buried structures such as services, basements and old foundations is unlikely to be a potential risk.

6.3 Geological Constraints

The research has identified evidence of potential hazards associated with the underlying ground conditions, either natural or man-made, and, therefore, it is recommended that further work be carried out to confirm the presence, nature or extent of those hazards anticipated to impact on the site.

7. ENVIRONMENTAL SEARCHES

7.1 Potential Sources of Contamination

Details of the relevant searches are given in Appendix F.

A search was made of records held by various regulatory authorities and other statutory bodies to determine the presence or otherwise of past and current activities on or within 500m of the site which may have the potential to give rise to the presence of contamination. No records were found of activities within 500m of the study site.

7.2 Green Belt Areas

There are no designated areas of Adopted Green Belt land within 500m of the site

Green Belt Areas are generally areas that are designated as being under special consideration for development. Local Authorities may restrict the type of development, place particular planning constraints on proposed developments, or potentially restrict any development within a designated Green Belt Area.

7.3 Nitrate Vulnerable Zones

The site is located within an area designated as a nitrate vulnerable zone in relation to both surface and groundwater.

The nitrates directive defines a nitrate vulnerable zone as:

- Surface freshwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l; or
- Groundwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l; or
- Natural freshwater lakes or other freshwater bodies, estuaries, coastal waters or marine waters, which are not eutrophic or may become so in the near future if protective action is not taken.

7.4 Designated Sites

A review of the MAGIC (MultiAgency Geographic Information for the Countryside) website, ref www.magic.gov.uk, was undertaken to assess whether there were any Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) or Local Nature Reserves (LNR) which may be impacted by the development.

The enquiries indicated that there are no such areas.

7.5 Contemporary Trade Entries

There is a single contemporary trade entry recorded within 500m of the site; this is for Barkway Service Station (MOT Testing Centres) and is situated 41m Northwest of the site. This facility also operates as a petrol filling station.

8. PRELIMINARY RISK ASSESSMENT

8.1 General

The typical technical approach to assessing potential human health and environmental risks associated with the condition of land relies on the consideration of the relationship between contaminants, pathways and receptors, as defined below.

TABLE 5: Definitions

Contaminant	A hazardous substance or agent that has the capacity to cause harm or other damage to a receptor.
Receptor	An entity (e.g. human being, water environment, flora and fauna etc.) that is vulnerable to the adverse effects of the contaminant.
Pathway	The means by or through which a contaminant comes into contact with, or otherwise affects, the receptor.

In the UK, this relationship is termed a "pollutant linkage". The Conceptual Site Model (CSM) is a representation of the inter-relationship of all potential contaminants, pathways and receptors in a given land use scenario. The CSM is therefore a screening tool that should clearly and transparently identify relevant pollutant linkages that may warrant further assessment, as well as providing justification for those that are considered unlikely to exist. It is important to recognise that for a health or environmental risk to exist, all three elements of the relationship or linkage must be present. Thus:

- No contaminant » There can be no adverse effect on a receptor; and
- Nothing adversely affected by the contaminant » No harm or damage can arise.

It should be noted that even where both a contaminant and a receptor are identified, no harm or damage will occur if there is no pathway by or through which contact between the two can be established. It is also important to recognise that since contaminants, pathways and receptors can all change over time, the assessor must be precise about the time frame to which the risk assessment refers.

Consideration has been given to the potential for the subject site to be determined as "contaminated land" under Part 2A of the Environmental Protection Act 1990. Under Part 2A, Local Authorities have a duty to inspect sites from time to time to identify land that falls within a statutory definition of contaminated land, as assessed in the context of its current use and setting. Part 2A inspections are intended to focus primarily on land that may present unacceptable health and environmental risks but which cannot be regulated by planning controls or other enforceable mechanisms. It should be noted that it is not possible for land whose condition is assessed as being 'fit-for-purpose' under the planning regime to be identified as "contaminated land" under Part 2A.

The primary purpose of this report is to assess the potential for ground contamination derived at the subject site. Reference has also been made to off-site sources of contamination, such that if ground contamination is encountered during a subsequent site investigation a reasonable judgement as to its origin either on or off the site may be undertaken.

8.2 Potential Sources of Contamination

The research has not identified any potential sources of contamination which may form a pollutant linkage onsite.

The petrol filling station/garage situated about 40m northwest of the site may represent a potential source of contamination. The garage first appeared in the 1970s and may have had fuel stored in Underground Storage Tanks (USTs) since that time.

8.3 Potential Receptors and Exposure Pathways

The receptors normally considered in land contamination assessments are taken to include, but are not restricted to, those specified in the Statutory Guidance to Part 2A. In general, receptors may be grouped as follows:

- Humans (on-site and off-site);
- Controlled waters (surface and groundwater close to or beneath the site); and
- Buildings and materials of construction on or under the site, or in the vicinity.

8.4 Human Health

No onsite sources have been identified.

The petrol filling station may be considered a source. Given the time elapsed since the garage was first present (over 35 years) there is a risk that petrol/diesel may have leaked from USTs and impact on the site. In addition, vapours may also have migrated to site although it is judged that there is a low risk of the site being significantly impacted by volatile contaminants such as petroleum hydrocarbons.

Construction workers are potentially at greater risk as they are more likely to be exposed to any contaminated soils via the identified exposure pathways. However, it is considered that such risks could be effectively ameliorated by the use of appropriate personal protective equipment (PPE) and health and hygiene practices.

Off-site human receptors include the occupiers of neighbouring sites and visitors, utility maintenance workers and the general public. Relevant exposure pathways could include:

- Ingestion of liquid discharges or soils, and soil-derived airborne dusts migrating from the subject site;
- Inhalation of soil-derived dusts and gases/vapours from the subject site; and
- Dermal contact with liquid discharges, soils, and soil-derived dusts from the subject site.

It is judged that the risks to off-site human receptors could include dust generation during construction works. However, as good practice, appropriate dust suppression measures should be implemented at the site regardless of contamination.

8.5 Controlled Waters

The site is underlain by the Lowestoft Formation and the Lewes Nodular Chalk and Seaford Clay Formation (undifferentiated).

Based on the nature of the conceptual source of contamination identified by this assessment there is judged to be a negligible risk of the underlying soils being significantly impacted with soluble and mobile contaminants that could migrate significant distances from the study site and impact sensitive receptors. When considering the nature of the identified conceptual source of contamination, coupled with the relatively low sensitively to the study site, the risks posed to controlled waters are not judged to be significant.

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Off-site human receptors include the occupiers of neighbouring sites and visitors, utility maintenance workers and the general public. Relevant exposure pathways could include:

- Ingestion of liquid discharges or soils, and soil-derived airborne dusts migrating from the subject site;
- Inhalation of soil-derived dusts and gases/vapours from the subject site; and
- Dermal contact with liquid discharges, soils, and soil-derived dusts from the subject site.

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8.6 Buildings and Services

The built environment is taken to include permanent and semi-permanent structures, such as houses, offices, commercial and industrial buildings etc. and associated services such as water supply pipes, drains, power and telecommunications cables. Buildings and service runs may also contain enclosed spaces where explosive, flammable or toxic gases and vapours may accumulate, presenting risks to both occupants and the buildings.

8.7 Initial Conceptual Model

An Initial Conceptual Site Model (CSM) table is given in Table 8 and provides a tabular representation of the inter-relationship between potential contaminants, pathways and receptors on the site, taking into account the proposed end use and environmental setting of the site. It should be noted that the behaviour of different contaminants in the environment will depend, among other factors, on the chemical properties, and on the prevailing site-specific conditions that may allow (or preclude) the existence of a particular exposure pathway.

TABLE 6: Initial Conceptual Site Model

Potential Source	Potential Contaminant	Potential Migration Pathway	Potential Receptor	Likelihood of Occurrence	Potential Magnitude	Overall Risk Classification	Discussion
Offsite Petrol Filling Station	TPH Vapours	Contact with or ingestion of contaminated soils. Inhalation of dust Migration into enclosed spaces leading to asphyxiation/explosion	Future Site Users Construction Workers Structures	Low	Medium	Low Risk	Fuel contamination may have migrated to site from the nearby PFS Vapours may have migrated to site

8.8 Conclusions of Environmental Risk Assessment

The research has identified evidence of potential sources of contamination on or which may impact on the site, with plausible pathways to the likely receptors, and therefore potential pollution linkages have been suggested.

It is recommended that further work be carried out to confirm the presence, nature of extent of any contamination which is anticipated to impact on the site.

8.9 Consultation

During development, consultation may be required for a number of reasons with a number of regulatory authorities. The following provides an indication as to the most likely authorities with which consultation may be required:

- **Local Authority**: There may be a planning condition regarding contamination and consultation will be required with a designated Contaminated Land Officer within the Environmental Health Department. The Local Authority is generally concerned with human health risks.
- **Environment Agency**: Where a site is within a groundwater source protection zone or has been designated as a special site the Environment Agency is likely to be involved to ensure that controlled waters are protected.

Based on the results of any consultation, there may be specific investigation and/or remediation requirements imposed by one or more of the Authorities.

10. APPENDICES

A. PLANS & FIGURES
B. SITE PHOTOGRAPHS
C. WALKOVER FIELD RECORDS
D. ENVIROCHECK DATA – HISTORICAL MAPS
E. ENVIROCHECK DATA – ENVIRONMENTAL SETTING
F. ENVIROCHECK DATA - DATASHEETS
G. PROPOSED PHASE II GROUND INVESTIGATION