

The Engine Shed, Summerseat

Phase 1 Preliminary Risk Assessment

Job Number: LKC 24 1175

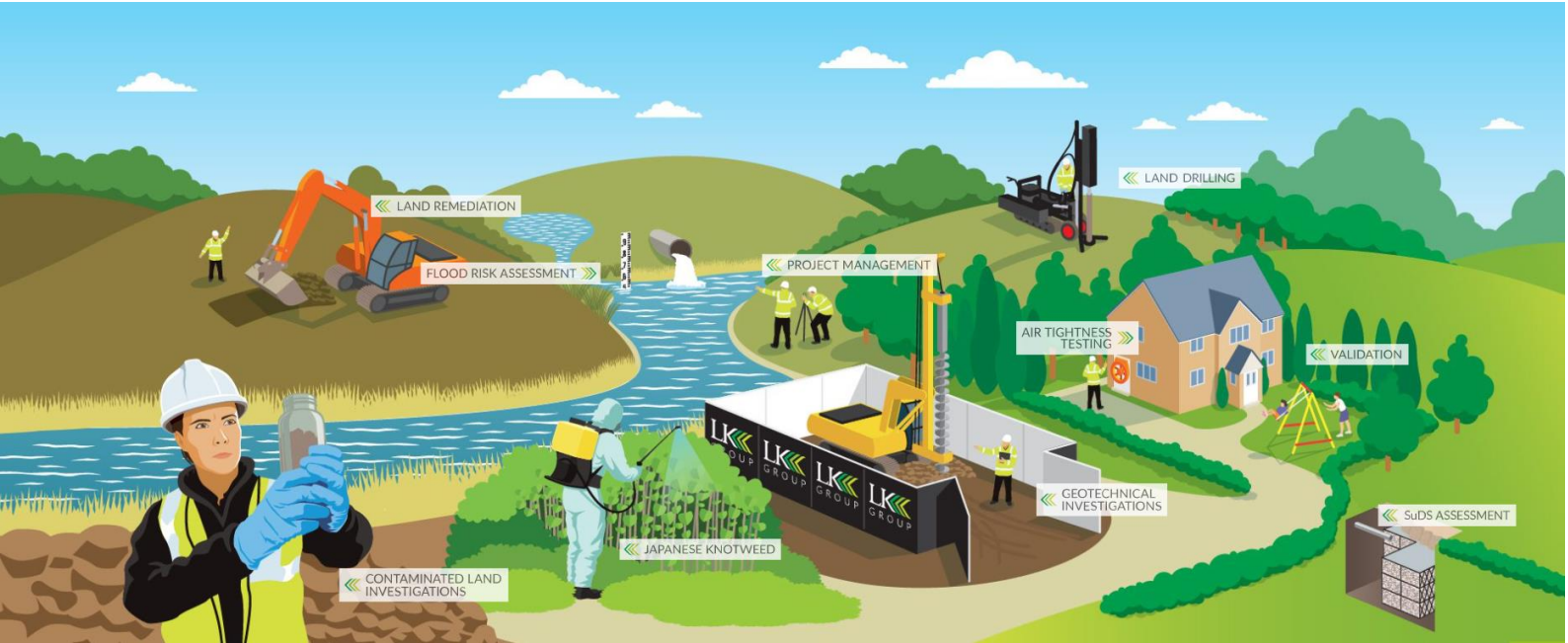
Date: July 2024

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>> Eton Business Park, Eton Hill Rd, Radcliffe, Greater Manchester M26 2ZS
 >> 0161 763 7200 >> info@thelkgroup.com >> www.thelkgroup.com

Company registered in England and Wales No. 06767704

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Appendix B – Envirocheck Report

Appendix C – Historical BGS Boreholes

Appendix D – Zetica UXO Unexploded Bomb Risk Map

Appendix E – Relevant Previous Information

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1. Introduction

LK Consult Ltd (LKC) has been commissioned to carry out a Phase 1 Preliminary Risk Assessment (PRA) for Summerseat Engine Shed, Ramsbottom.

In accordance with current guidance (including LCRM¹ and the National Planning Policy Framework (NPPF)²), the PRA will include a site reconnaissance, site history, geology, hydrogeology, hydrology, mineral search, and a landfill search. Information gathered from the desk study and site reconnaissance will be used to develop a contamination conceptual model for the site.

The following work has previously been undertaken on the site:

- Preliminary Risk Assessment (PRA) report undertaken by Greater Manchester Geological Unit (ref. 4966, dated 16th November 2005).
- Geo-Environmental Investigation and Risk Assessment Report undertaken by LKC (Ref: CL-602-CL1186-02, dated 21st December 2007).

Bury MBC have previously provided comments on the above reports which included agreement with the recommendations for remedial works. Given the time elapsed since these reports and to support a new planning application for the site, it was considered that a re-risk assessment using contemporary factual information and current UK standards and guidelines was required.

Based on the findings, appropriate recommendations have been derived to address the potential contamination constraints.

A summary of the site details is presented in Table 1-1. Figure 1 indicates the site location and boundary plan. Figure 2 indicates the proposed development.

Location	End of Rowlands Road, to the south-east of Miller Street, Ramsbottom. Centred at National Grid Reference 379440E 414600N.
Area	Approximately 7,000m ² .
Topography	120 meters above ordnance datum (AOD).
Current Site Use	Abandoned Goods Shed building facing East Lancashire Railway tracks. Hardstood ground and rough grassland across the site.
Proposed Development	Conversion of existing building to a restaurant with car parking.

Table 1-1: Summary of site details.

2. Historical Review

2.1. Historical Map Review

In compiling the site history, LKC consulted Envirocheck historical mapping (Appendix A) and other public domain maps / aerial photography.

Table 2-1 summarises features on site. Table 2-2 summarises potentially contaminative land uses within approximately 50m and potentially infilled features within approximate 250m.

Note that the planning boundary shown on Figure 1 is larger than the site boundary shown on the Envirocheck report. Distances have been amended in the table below to account for this.

Site Features	Location on Site	Dates Present		Comments
		From	To	
Vacant	Whole Site	1851	1851	Site is undeveloped on earliest available mapping.
Goods Shed	W	1893	2024	Building annotated as a good shed. Anecdotal evidence suggests it has most recently been used as a machinery repair workshop. Present onsite from 1893 to present.

Table 2-1: Summary of site features. Dates are based on available historical map editions.

Surrounding Area Features	Distance (m)	Direction	Dates Present		Comments
			From	To	
Railway Track with associated sidings	10	SW	1893	2024	Annotated as 'Summerseat Station'. Noted as present on current mapping.
River Irwell	25	SW	1893	2024	Still present on current mapping. Annotated as flowing S/SW on 1969 mapping.
Gasometers	80	SW	1893	1963	Present until 1963 mapping – from 1963 area becomes allotments.
Old sandstone quarry	130	NE	1893	2006	No longer present after 2006. 2024 aerial photography shows vegetation covering area.
Filter Beds	85, 170, 180, 195	NW	1893	1982	Associated with sewage works. No longer present by 1993 mapping.
Sludge tanks	140	NW	1929	1982	No longer present after 1993 mapping. Associated with sewage works.

Table 2-2: Summary of potentially contaminative features within 50m and potentially infilled features within 250m. Dates are based on available historical map editions.

2.2. Previous Investigations

The following work has previously been undertaken on site:

- Preliminary Risk Assessment (PRA) report undertaken by Greater Manchester Geological Unit (ref. 4966, dated 16th November 2005).

- Geo-Environmental Investigation and Risk Assessment Report undertaken by LKC (Ref: CL-602-CL1186-02, dated 21st December 2007).

The PRA identified potentially contamination risk due to the likely presence of made ground onsite and a risk from hazardous gas. It was considered that detailed intrusive investigations were required to assess these linkages further.

In order to investigate the potential pollutant linkages identified in the previous preliminary contamination conceptual model, an intrusive investigation was undertaken by LKC on the 4th October 2007.

The site investigation involved the drilling of five window sample boreholes (referenced WS1 to WS5) to depths of between 3.00 and 4.00mbgl. Seven hand augers (referenced HA1 to HA7) were also excavated to depths of between 0.40 and 0.95mbgl. Six of the hand augers were located on the embankment.

Ground conditions are summarised in Table 2-2 below:

Depth to Top of Strata (mbgl)	Depth to Base of Strata (mbgl)	Thickness of Strata (m)	Description
0.0 to 0.4	0.2 to 0.8	0.2 to 0.8	TOPSOIL: Gravelly topsoil with organic material. Topsoil evident in locations HA1 to HA5 only.
0.0	0.4 to 3.2	0.4 to 3.2	MADE GROUND: Ashy gravelly/sandy/clayey/cobbly made ground with coal fragments. With hydrocarbon odour (at 1m) in WS1.
0.5 to 1.5	≥0.6 to 3.0	≥0.1 to 1.5	SILT: Grey/brown silt. Stratum depth not proved in HA3. Silt evident in WS1 and HA3 only.
0.8 to 3.0	≥0.85 to ≥4.0	≥0.05 to ≥1.1	SAND: Dense grey/brown sand. Stratum depth not proved in WS2 and HA5. Evident in locations WS1 to WS2, WS5 and HA5 only.
0.0 to 2.3	≥0.6 to ≥3.0	≥0.35 to ≥1.7	CLAY: Orange/grey firm to stiff sandy clay. With hydrocarbon odour (at 1.3 to 2.5m) in WS3. Clay evident in locations WS3, WS5 and HA4 to HA5 only.
3.2	≥3.4	≥0.2	MUDSTONE: Weathered grey mudstone. Mudstone evident in location WS4 only.
3.9	≥4.0	≥0.1	SANDSTONE: Possible sandstone cobble. Sandstone (possible cobble) evident in location WS1 only.

Table 2-2: Summary of ground conditions for land at Summerseat Goods Yard, Bury.

12no. soil samples were collected and tested for contaminants of concern. No elevated levels of contaminants can be identified for soil on site when compared to general soil assessment criteria for a commercial land use scenario. 1no. slight elevation of Benzo(a)pyrene was identified when compared against public open space criteria within HA1. This location is within the embankment where access will be restricted to site users therefore no significant pathway to receptor is anticipated.

3no. leaching tests were undertaken. Elevated results for petroleum hydrocarbons were identified for WS3 leaching test (0.7m). Based on the above LKC considered further investigation to be necessary to assess the risk to controlled waters.

Six gas monitoring visits were undertaken on the study site. No elevated concentrations of carbon dioxide or methane recorded, and no gas protection measures were considered to be necessary.

LKC recommended that if new pipework is to be installed and founded within the made ground it is likely barrier pipe would be required, subject to completing a United Utilities (UU) risk assessment form and consultation with UU.

LKC recommended the identified possible hydrocarbon hot spots are further assessed using machine excavation, delineating any hydrocarbon contaminated strata by olfactory assessment and exporting soils off site for appropriate disposal (around WS1 and WS3).

Relevant information including sampling location plan, soil testing results and gas monitoring results from the previous LKC report is included in Appendix E.

3. Environmental Setting

A summary of environmental settings is presented in Table 3-1, based on a review of available environmental data.

Note that the planning boundary shown on Figure 1 is larger than the site boundary shown on the Envirocheck report. Distances have been amended in the table below to account for this.

Categories ^(data sources)			Details
Geology ^{1, 2}	Artificial Ground		No BGS recorded artificial ground.
	Superficial Deposits		Till, Devensian (diamicton). Alluvium (clay, silt, sand and gravel) to the W of site and along the W site boundary
	Bedrock		Marsden Formation (Sandstone).
	BGS Logs (100m)		BH Ref: SD71SE61, 40m NW: made ground – firm grey-brown mottled sandy gravelly clay with some ash, brick fragments and cobbles to 6.20m, made ground – soft brown silty sandy clay with some gravel to 7m, soft grey sandy gravelly clay with sandstone fragments and cobbles (probable made ground) to 8m, soft grey brown silty organic clay (peat) to 8.7m, medium dense sand and gravel 9.3m, dark grey silty moderately/slightly weathered silty mudstone, weak > 17m. BH Ref: SD71SE62, 65m W: made ground – loose ash with some sandy clay to 1.6m, soft grey-brown mottled sandy clay with some gravel to 2.9m, dark grey silty moderately to slightly weathered silty mudstone – weak becoming moderately weak > 11.1m. BH Ref: SD71SE60, 65m NW: made ground – loose to medium dense ash silt sand and gravel size with some clayey ash to 4.4m, made ground – grey, brown sandy very gravelly clay with sandstone fragments > 5.4m.
	Hydro-geology ¹	Aquifer Designation	Superficial
		Bedrock	Secondary A Aquifer.
Source Protection Zone (SPZ)		Site not within an SPZ.	
Groundwater Abstractions (100m)		None.	
Hydrology ¹	Surface Watercourses (100m)		River Irwell 25m W, flowing W.
	Flooding Risk ^{1, 3}		Flood Zone 1.
	Surface Water Abstractions (100m)		None.
	Discharge Consents (onsite)		None.
	Pollution Incidents (onsite)		None.

Table 3-1: Summary of the environmental setting.

Notes: Distance in brackets is the distance from site that features are included. Where no distance given, features relate to onsite only.

Data Sources:

1 Envirocheck Report (Appendix A & B).

2 <http://mapapps2.bgs.ac.uk/geoindex/home.html>

3 <https://flood-map-for-planning.service.gov.uk/location>

Categories ^(data sources)		Details
Minerals & Mining ^{1,4}	Coal Mining	Within a Coal Reporting Area. Not within a Development High Risk Area.
	Surface Mineral Extractions (250m)	155m SW – Lower Summerseat, Commodity: Sandstone, Status: Ceased. 165m SW – Chest Wheel Bridge, Commodity: Sandstone, Status: Ceased. 170m NE – Rowlands, Commodity: Sandstone, Status: Ceased.
	Non-Coal Mining Area	No hazard.
Ground Stability ¹	Collapsible Ground	No to very low hazard.
	Compressible Ground	Moderate hazard in W.
	Ground Dissolution	No hazard.
	Landslide	Moderate hazard.
	Running Sand	No to very low hazard.
	Shrinking / Swelling Clay	Very low hazard.
Landfill Sites (250m) ¹	Known / Registered	20m NW – ‘Miller Street’. Deposited Waste included inert waste. Operational 1979-1984.
	Potentially Infilled Land (non-water and water), based on Envirocheck Report	2no.features: 164m SW, 190m SW,
	Potentially Infilled Sites, based on LKC historical review	6no. features: See Table 2-1 and Table 2-2.
Radon Potential ¹		<1% of homes above Action Level. No protective measures are necessary in the construction of new dwellings or extensions.
Designated Sites (50m) ¹		Adopted Green Belt 0m NE.
Contemporary Trade Directory (50m) ¹		None.
Fuel Station Entries (50m) ¹		None.
Unexploded Ordnance Risk (UXO) – Zetica Risk Map	Zetica Risk Map ⁵	Bomb Risk: Low. Strategic Targets: None identified within 100m.

Table 3-2 continued: Summary of the environmental setting.

Notes: Distance in brackets is the distance from site that features are included. Where no distance given, features relate to onsite only.

Data Sources:

1 Envirocheck Report (Appendix A & B).

4 The Coal Authority Web Mapping Services (WMS) / <http://coal.decc.gov.uk/en/coal/cms/publications/data/map/map.aspx>.

5 Zetica UXO Unexploded Bomb Risk Map (Appendix D).

4. Site Reconnaissance

A site reconnaissance was carried out on 9th July 2024.

Relevant features identified on site are summarised below:

- The site comprises a large irregular shaped parcel of land containing a stone commercial building.
- The site is highly vegetated and overgrown with mature trees along the eastern boundary. Much of the site surface is covered by with sandstone cobbles. The site is predominantly flat and is located on a steeply sloping hillside, supported by a large stone retaining wall on Rowlands Road. The eastern site boundary slopes steeply up to the east.
- A railway line is located along the western site boundary.
- The stone building is the former engine shed for the adjacent railway. Approximately 60% of the building footprint is covered with the original sandstone railway platform. The remainder of the interior of the building is concrete hardstanding. The building has been partially refurbished including tanking of the rear wall which abuts the hillside.
- Access to the site is from Rowlands Road where a steel palisade gate is located.

The surrounding area comprises the East Lancashire Railway to the West. Summerseat Station to the north-west and Woodland to the east. There does not appear to be any additional areas of concern or potential contamination identified from previous LKC site attendance.

Site photographs are provided in Table 4-1.

	
Photograph 1: View inside building.	Photograph 2: View along eastern site boundary looking S.

	
Photograph 3: View across site looking N.	Photograph 4: View of existing building from Rowlands Road..

Table 4-1: Site photographs.

5. Preliminary Conceptual Model

5.1. Introduction

The aim of the conceptual model is to provide a preliminary assessment of the likelihood of a pollutant linkage for each potential combination of contaminant, pathway, and receptor. A conceptual model can be used to make an informed decision on the contamination risks associated with the site and whether further site investigation work is required.

The sections below are therefore divided into potential contaminant, potential pathway and potential receptor as described in LCRM³, on the premise that, if there is no pollutant linkage, then there will be no risk to the receptor. The final section provides an assessment of the potential pollutant linkages that may still be present on the site if redevelopment were to occur.

5.2. Potential Contaminants

Potential viable contamination sources are detailed in Table 5-1. These are split into onsite sources, offsite sources and underlying geology.

Potential Source	Contaminants
On site	
Made ground below some or all of site (e.g., site levelling, general made ground)	Demolition rubble, ash, and clinker: asbestos, heavy metals, sulphates, PAHs ⁶ . Other fill material sources: unknown organic / inorganic compounds. If organic / putrescible material: hazardous gas (principally carbon dioxide and methane). Previous site investigation suggests made ground to depths of approximately 3.00mbgl. No elevated contaminants identified in previous site investigation.
Good Shed and repair workshop	Heavy metals, sulphates, PAHs, petroleum, hydrocarbons, oils, fuels, other organic and inorganic compounds. Previous investigation suggests localised areas of petroleum, hydrocarbons (north and centre of site, vicinity of WS1 and WS3). Locations not within areas of landscaping, which will be inaccessible to site users.
Surrounding Area	
Railway land (including railway line / sidings).	Fuels, oils, PAHs, creosote, solvents, heavy metals, sulphate, phenols and asbestos ⁸ . Significant migration of herbicides not anticipated from offsite features.
Landfills / offsite potentially infilled features within 250m	Given size, distance and age of features, there is considered to be a limited source of hazardous gas (principally carbon dioxide and methane). The landfill adjacent was only operational until the 1980s, therefore the gassing potential will be low given the amount of time since last infilling. Previous site investigation included 6no. monitoring visits. No elevated gas concentrations identified therefore risk considered low.
Underlying Geology	
Radon Affected Area	<1% of homes above Action Level. No protective measures are necessary in the construction of new dwellings or extensions. No further consideration required.
Superficial / Bedrock	No significant contamination sources identified.

Table 5-1: Potential contamination sources.

5.3. Potential Receptors

Potential receptors are detailed in Table 5-2.

Receptors	
Human health	Future site users (including visitors, and site workers). Offsite land users. As the proposed development is for commercial use, the most sensitive receptors (children) have not been included in this assessment.
Controlled waters	River Irwell 25m W. Secondary A Aquifers.
Buildings.	
Potable water pipes, if to be installed.	

Table 5-2: Potential receptors.

5.4. Potential Pathways

Potential pathways are detailed in Table 5-3.

Pathways		
Soil	Human health ¹² (commercial land use with soft landscaping)	Ingestion of soil. Ingestion of soil-derived indoor dust. Dermal contact with soil. Dermal contact with soil-derived indoor dust. Inhalation of soil-derived outdoor dust. Inhalation of soil-derived indoor dust. Inhalation of vapours outside. Inhalation of vapours inside. Omitted: ingestion of contaminated home-grown produce and ingestion of soil attached to home-grown produce.
Soil	Windblown dust and fibres to adjacent receptors.	
Soil	Direct contact with receptors (services).	
Surface water	Surface run-off over impermeable surface.	
Groundwater	Infiltration into the ground, through potentially contaminated material (contamination possibly going into solution).	
Groundwater and gas	Migration through potentially permeable strata and preferential pathways. Superficial (Till) likely to be low permeability. No preferential pathways are anticipated.	
Gas	Migration into buildings (e.g., via services) and accumulation of gases in confined spaces (potentially causing explosion if methane is present).	

Table 5-3: Potential pathways.

5.5. Preliminary Contamination Conceptual Model

The Preliminary Contamination Conceptual Model is illustrated in Table 5-4.

Generic potential pollutant linkages are described along with an assessment of the risk based upon guidance on probabilities and consequences outlined in CIRIA C552¹⁷.

In order to assess the potential risk for each pollutant linkage, an assessment of the magnitude of the potential consequence (severity) of the risk occurring and the magnitude of the probability (likelihood) of the risk occurring has been considered and classified. This is based on the guidance provided in CIRIA C552 and further details including a risk matrix is provided in Appendix F.

The probability is based on the site history, site reconnaissance, environmental setting, pathways, and receptors.

Reasonable worst-case consequence has been assumed at this stage.

Where LKC identified a low to very low risk, targeted or low-density intrusive investigation work, a watching brief (during construction work) or no investigation work will be recommended. This will be dependent on the nature of the site and the proposed development.

Where the risk falls into the moderate/low risk, LKC will undertake an assessment to establish what further work will be required.

Where LKC identifies a moderate or higher risk, intrusive investigation work or precautionary remediation is recommended.

Recommendations are discussed further in Section 7.

Due to the minor consequence associated with the phytotoxic effect to flora (i.e., loss of plants in a landscaping scheme), the overall risk for the majority of sites will be very low to low. Where soils contain significant concentrations of heavy metals, in general there will other pollutant linkages (i.e., the risk to human health) that will trigger the requirement for remediation (e.g., a clean environmental cover system). As such the risk to flora associated with phytotoxic contaminants will not be considered further.

The risk to buildings associated with elevated sulphate will be considered as part of the geotechnical assessment and will not be included in the contamination risk assessment.

It should be noted that there may be risk from short term exposure from contaminated soil to site workers. The Preliminary Contamination Conceptual Model deals with long term exposure to key receptors. Acute risks can be easily mitigated by good environmental management of the site during site works. Standard health and safety precautions (as per HSE guidance¹⁸) should be adopted by all workers involved with site enabling and construction works. Therefore, this receptor is not considered in the contamination conceptual model.

PL	Contaminants of Concern (source)	Pathway	Receptor	Probability	Consequence	Risk
1	Heavy metals, PAHs, sulphates, asbestos, other organic / inorganic contaminants (made ground, goods shed, offsite railway, no elevated contaminants during previous investigation).	Dermal contact. Inhalation of soil, fibres, and dust. Ingestion of soils, dust Windblown dust. Dermal contact. Pathway expected to be limited.	Future site users. Offsite receptors.	Unlikely	Medium	Low
	Petroleum hydrocarbons, fuels, oils (Goods shed, previous investigation identified possible hotspots)					
2	Volatile contaminants: PAHs (made ground, goods shed, offsite railway, no elevated contaminants during previous investigation).	Inhalation of vapours. Migration via permeable strata and preferential pathways.	Future site users. Offsite receptors.	Unlikely	Medium	Low
	Volatile contaminants: Petroleum hydrocarbons, fuels, oils (Goods shed, previous investigation identified possible hotspots)			Low Likelihood		Moderate / Low (localised)
3	Hazardous / ground gas: methane, carbon dioxide (made ground, potentially infilled ground within 250m)	Migration via permeable strata and preferential pathways. Inhalation of gas. Explosion in confined spaces.	Future site users. Buildings. Offsite receptors.	Unlikely	Severe	Moderate / Low
4	Heavy metals, PAHs (made ground, good shed, offsite railway station, no elevated contaminants during previous investigation).	Surface run-off. Migration via permeable strata and preferential pathways. Perched waters migration.	Groundwater Surface water	Unlikely	Medium	Low

Table 5-4: Preliminary Contamination Conceptual Model.

Notes: PL = Pollutant Linkage. Contaminant of Concern (CoC) - See Table 5-1 for contamination sources. See Section 7 for recommendations.

PL	Contaminants of Concern (source)	Pathway	Receptor	Probability	Consequence	Risk
4	Petroleum hydrocarbons, fuels, oils (Goods shed, previous investigation identified possible hotspots)	Surface run-off. Migration via permeable strata and preferential pathways. Perched waters migration.	Surface water	Unlikely	Medium	Low
			Groundwater	Likely		Moderate
5	Petroleum hydrocarbons, PAHs (made ground, goods shed, offsite railway, previous investigation identified possible TPH hotspots and elevated contaminants compared to water supplier guidance)	Ingestion of tainted water supply (should new potable pipelines be installed)	Future site users. Water pipes.	Likely	Medium	Moderate

Table 5-5 continued: Preliminary Contamination Conceptual Model.

Notes: PL = Pollutant Linkage. Contaminant of Concern (CoC) - See Table 5-1 for contamination sources. See Section 7 for recommendations.

6. Preliminary Geotechnical Risk Assessment

As no groundworks or structural changes proposed, a geotechnical assessment is not considered to be necessary for this development.

Should the footprint of the existing building be altered in the future, further consideration should be given to the geotechnical constraints of the site and a structural engineer should be consulted.

7. Summary Conclusions and Recommendations

7.1. Summary Conclusions

Table 7-1 summarises the site details, historical review, environmental settings and site reconnaissance.

Current Site Use & Pertinent Features	Abandoned Goods Shed building facing East Lancashire Railway tracks. Hardstood ground and rough grassland across the site.
Proposed Development	Conversion of existing barn to restaurant with car parking.
Main Historical Features	Onsite: vacant land, goods shed. Surrounding Area: railway line, reservoirs, ponds, sludge beds, filter beds.
Geology / Hydrogeology	Artificial: No BGS recorded artificial. Superficial: Till. Secondary A Aquifer. Bedrock: Marsden Formation (sandstone). Secondary A Aquifer.
Site Reconnaissance	Disused goods shed building that has been partly refurbished and dense vegetation. N There does not appear to be any additional areas of concern or potential contamination identified from previous LKC site attendance.s
Landfills / Infilled ground	1no. recorded landfill. Potentially infilled ground identified.
Previous Investigation	Previous site investigation identified made ground to a maximum depth of 3.00mbgl. No elevated contaminants when soil results compared to assessment criteria. No elevated gas concentrations from gas monitoring. Areas of possible petroleum hydrocarbon hotspots which should be investigated further.

Table 7-1: Summary of site details, historical review, environmental settings and site reconnaissance.

A preliminary contamination conceptual model has been produced by LKC, which is summarised in Table 7-2.

Pollutant Linkage	Contaminants	Risk
PL1: Contaminants posing a risk to receptors via dermal contact, ingestion and inhalation (of soil, dust, fibres)	Heavy metals, PAHs, sulphates, asbestos, other organic / inorganic contaminants Petroleum hydrocarbons, fuels, oils	Low
PL2: Volatile contaminants posing a risk to receptors via the inhalation of vapours.	Volatile contaminants: PAHs	Low
	Volatile contaminants: Petroleum hydrocarbons, fuels, oils	Moderate (localised)
PL3: Gas posing a risk to buildings and receptors via the migration of gas into building causing explosion and asphyxiation.	Hazardous and Ground Gas	Moderate / Low
PL4: Mobile contamination posing a risk to controlled waters via the migration through permeable strata.	Heavy metals, PAHs	Low
	Petroleum hydrocarbons, fuels, oils	Moderate / Low (surface water)
		Moderate (groundwater)
PL5: Organic contaminants posing a risk to receptors.	Petroleum hydrocarbons, PAHs	Moderate

Table 7-2: Summary risk table.

7.2. Recommendations

The recommendations provided below are considered appropriate for the site based on the site investigation work undertaken. LKC should stress that no remediation, enabling works or designing works should take place until Regulatory approval has been obtained.

A summary of remediation requirements is included in Table 7-3.

PL	Recommendation
1	No remediation required.
2	No remediation required. Further work associated with PL4 should address localised moderate risk.
3	No remediation required.
4	Further work required. Possible hydrocarbon hot spots should be identified using machine excavation, follow by delineating any hydrocarbon contaminated strata by olfactory assessment and exporting soils off site for appropriate disposal (around WS1 and WS3).
5	Potable water pipeline assessment required with utility provider should new potable pipework be installed.

Table 7-3: Remediation Summary.

All the remediation and validation work should be documented in a Site Completion Report. The Completion Report will be provided to satisfy the outstanding contaminated land planning condition.