

Phase 1 Contamination Assessment

The Delta Building, 121 Kings Road, Reading, RG1 3ES

4 February 2025

London Two Limited



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Executive Summary

Context

This assessment has been prepared in the context of supporting a future planning application to Reading Borough Council for the proposed change of use of the existing ground to fourth floors inclusive, from office space to residential flats at The Delta Building, 121 Kings Road, Reading, RG1 3ES.

Risk Summary

The overall land contamination risk estimation in the context of the proposed change of use is Low.

Land Contamination Key Findings

Current Condition: The potential for land contamination hazards associated with current and recent site usage is very low.

Historical Uses: The site (and immediately surrounding area) was occupied by a biscuit factory between Ca.1877-1990 and a gas works between Ca.1877-1956. There is some (likely low) potential for historical sources of contamination on site.

- The site was formerly occupied by a wider gasworks that extended off site to the east. Typical contamination associated with gasworks includes tar, hydrocarbons, PAHs, heavy metals, cyanide and ammonia. However, the current day building has been constructed with a basement car park of significant depth which is understood to extend beneath the entirety of the building's footprint. On this basis, it can be reasonably assumed that any contamination would have been removed from site as part of the basement construction dig.
- The potential for residual contamination sources if present to affect the building and its future residential users is very low. The site is almost entirely covered by hardstanding which will act as a barrier to human exposure. Furthermore, the presence of a well-ventilated basement car park will preclude the potential for vapours to enter the residential dwellings above.
- Historically, the wider gas works extended 50m east of the site. As above, the widespread presence of hardstanding across the study site and basement level carpark will preclude the potential for exposure to off-site contamination sources.
- The property is underlain by sensitive groundwater resources. However, there is a low potential for historical mobile sources of contamination beneath the site which is covered almost entirely by hardstanding which will preclude the potential for infiltration and mobilisation of contamination (if present) into the aquifer.
- The property is not within a Radon Affected Area and no protection measures are required in the proposed development.
- There is no evidence of ground gas generating sources beneath or within the vicinity of the property.

Recommendations

This assessment has not identified any plausible pollutant linkages associated with the proposed change in use of the existing building for residential dwellings (no gardens). As such, there is no requirement for further contaminated land assessment.

This Executive Summary forms part of our full report and should not be used as a standalone document.



1 Introduction

1.1 Authorisation

Ashfield Solutions Limited ("Ashfield") was commissioned by London Two Limited ("London Two" or "the client") to undertake a Phase 1 Environmental Site Assessment, in relation to the Delta Building, 121 Kings Road, Reading, RG1 3ES (the "site"). The location and boundary of the site is shown in Drawing 01.

This report has been prepared in accordance with email instruction dated 13th January 2025.

1.2 Objective and Context

This report has been prepared in the context of supporting a future planning application to be made to Reading Borough Council ("RBC") for the change of use of the ground to fourth floors inclusive, from office space to flats with further flats to be developed within the plant room located in the curved roof.

With regard to anticipated planning conditions, it is noted that a planning application for a similar change in use has been submitted to RBC for the adjacent building, namely Kennet Place (The Alpha Building), 121 Kings Road, Reading, RG1 3ES, under planning application reference PL/24/0997, whereby RBC imposed standard contaminated land conditions as stated below:

"The units hereby approved shall not be occupied until an assessment of the nature and extent of contamination has been submitted to and been approved in writing by the Local Planning Authority. This assessment must be undertaken by a competent person, and shall assess any contamination on the site, whether or not it originates on the site. Moreover, it must include:

- (i) a survey of the extent, scale and nature of contamination.*
- (ii) an assessment of the potential risks to:*
 - *human health,*
 - *property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,*
 - *adjoining land,*
 - *groundwaters and surface waters,*
 - *ecological systems,*
 - *archaeological sites and ancient monuments"*

On the basis of the above, this assessment seeks to discharge the anticipated contaminated land conditions that will be attached to a future grant of planning for the development. This report will identify any environmental issues at the site, including the potential or actual presence of contamination, and determine the corresponding implications in terms of the development proposed

In the context outlined above, the objectives of this report, are to:

- Provide an outline conceptual site model and Preliminary Risk Assessment (PRA), consistent with the overarching industry guidance laid out in the Environment Agency's Land Contamination Risk Management (LCRM) framework.



- Provide recommendations as to whether further site investigations and/or risk assessments are required under the LCRM to address potential contamination issues in the context of the proposed development.

1.3 Information Sources

This report has been prepared using the following information sources:

- Environmental data searches (referred to hereafter as “the Environmental Data Searches”:
 - Landmark Envirocheck® Site Sensitivity report (Jan-2025)
 - Landmark Envirocheck® Historic Map report (Jan-2025)
 - Landmark Envirocheck® Geology report (Jan-2025)
- British Geological Survey Onshore GeoIndex Service (accessed Jan-2025)
- Coal Authority Interactive Map (accessed Jan-2025)
- Zetica UXO online UXB Risk Map¹ (accessed Jan-2025)
- Environmental Regulations 2004 Request. RE: Environmental Information Request: 121 KINGS ROAD, READING, RG1 3ES, provided by Reading Borough Council, 3rd December 2024, Ref. PR202412-965210.

1.4 Report Limitations

This report has been prepared with due care and diligence in accordance with industry good practice and guidance. The conclusions presented in this report represent Ashfield's professional judgement based upon the information available to us and the conditions existing as of the date of this report (as indicated in Section 1.3). Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ashfield was accurate and complete at time of receipt; and to the extent that site access was available to us.

This review is not intended as legal advice, nor is it an exhaustive review of site conditions or facility environmental compliance. Ashfield makes no representations or warranties, expressed or implied, about the conditions of the site. If additional information or data becomes available, which may affect the opinions expressed in this report, Ashfield reserves the right to review such information and, if warranted, to modify the opinions accordingly. This report has a limited lifespan and may need updating to reflect continually evolving environmental legislation or changes to site activities.

Attention is drawn to the following specific limitations:

- **Asbestos** – this report does not constitute an Asbestos Management Survey, Building Survey or Refurbishment Survey; and should not be relied upon in any such capacity. However, where we believe asbestos to be present during a site inspection; or where it has been recorded in any supporting information, we have provided informative references herein.
- **Non-native invasive species (e.g. Japanese Knotweed)** – unless otherwise stated this report does not constitute a formal survey for invasive non-native species. However, where identified we have provided informative references and recommendations herein. The lack of any observed invasive species should not be interpreted as positive confirmation that invasive species are completely absent from the site; seasonality can affect the extent to which positive identification of non-native invasive species can be identified.
- **Storage Tank Integrity** – this report does not constitute any formal inspection of oil or fuel storage tanks and associated infrastructure in relation to the Control of Pollution (Oil Storage) Regulations, 2001. However,

¹ <https://zeticauxo.com/downloads-and-resources/risk-maps/>



where identified we have included basic observations in relation to the condition of tanks, bunds, pipes and associated infrastructure, as well as any evidence of leaks and spills.

- **Ecology** – this report does not constitute a formal survey of ecological potential or existing habitats. Ecological surveys may be required to evaluate ecological potential and development constraints; such surveys usual need to be undertaken at specific times of the year.
- **Building Structural Integrity/Ground Stability** – this report does not constitute a full appraisal of the structural integrity of the site, built environment and natural geotechnical bearing properties of the soils underlying the site.
- **Environmental Permits** – records of compliance with environmental permits are not available as part of standard environmental data searches. Unless explicitly stated otherwise this report excludes any formal assessment of compliance with environmental permits and does not include any follow-up consultation with the regulatory authorities in relation to the operator's compliance with any environmental permits.



2 Site Environment

2.1 Site Setting

The site occupies an area of approximately 0.3ha and comprises a five-storey building of commercial usage (office space) and a basement level car park with separate access. The site is accessed by foot via Kings Road. Vehicular access to the basement level car park is via Gas Works Road. A summary of the physical site characteristics is present in Table 1. Surrounding land uses are summarised in Table 2.

Table 1 - Site Physical Characteristics

Topography	The site is situated 40m Above Ordnance Datum ("AOD") and the surrounding topography is Level.
Ground Cover	The ground cover of the site is predominantly impermeable cover comprising the building and adjacent paved areas in the courtyard.

Table 2 - Surrounding Land Uses

North	River Kennet and the Huntley Wharf residential development beyond.
East	Disused buildings with residential dwellings off Gas Works Road.
South	Gas Works Road junction from Kings Road and residential buildings.
West	The Alpha and Beta buildings and Forbury Road.

2.2 Current Site Condition

An evaluation of the current condition of the property has been determined through a review of the site inspection information provided by the client, including site photography. The information supplied is deemed sufficient for determination of the current site condition and potential contamination sources. Table 3 provides a summary of the current site condition and any environmental hazards associated with current activities.

Table 3 - Environmental Liabilities: Contemporary Site Activities and Condition

Land Contamination Hazards	
Above-ground tanks (ASTs) ²	None identified.
Below-ground tanks (USTs)	None identified.
Hazardous chemical storage (IBC, Drum, Containers)	None identified.
Evidence of oil/chemical spills/leaks	None identified.
Substations	Final distribution substation - indoor (built into building).
Fly Tipping/Stockpiles	None identified.
Asbestos	No observations of suspected asbestos made; however, please note that this report does not constitute a formal asbestos survey.

² Addressing the storage of oils and chemicals, posing a high source potential for Land Contamination hazards. ASTs with very low to negligible land contamination source potential, such as water tanks and containing solid matter (such as grain silos), are specifically outlined in 'Additional Site Observations'.



Additional Site Observations

Waste bins are located in a courtyard area adjacent to Gas Works Road. All waste bins were unused, and the surrounding area shows no evidence of leaks or spillages.

*This includes small containers, drums and intermediate bulk containers (IBCs).

Key Points

Based on the evidence available to us we consider the potential for land contamination hazards associated with current site uses to be very low. Section 4 provides further evaluation of the risks associated with any material hazards identified in the above table taking into consideration the sensitivity of the surrounding environment and land uses.

2.3 Historical Land Use

Historical maps and images (where available) have been reviewed to identify and draw attention to any potentially contaminative industrial practices or land uses that may have compromised the site's environmental quality in the past. A summary of the key findings of our independent historical map review is presented in Table 4.

Table 4 - Historical Land Use

Map or Image Date	Description of Site
1877	On-site: A third of the west of the site is occupied by a 'biscuit factory' building that extends offsite to the west. A railway siding intersects the centre of the site running north-south. The eastern part of the site is occupied by an unnamed building that could form part of the nearby gas works or the steam sawmill to the east. Off-site: To the immediate north is the River Kennet with the continuation of the biscuit factory beyond. Gasholders are present which form part of the wider gas works, located 50m east of the site. A steam sawmill is located 52m southeast of the site. A prison is located 103m northwest of the site. Kennet & Avon Canal is located 44m south of the site. A sewage pumping station is located 76m northeast of the site. Rail lines (Great Western Railway) are located 245m north of the site. Dwelling houses predominantly occupy land to the south and west of the site.
1879	On-site: The east of the site is occupied with two coal stores and two retort houses, forming part of the wider gas works. Off-site: There are no significant changes in use.
1883	On-site: There are no significant changes in use. Off-site: There are no significant changes in use.
1899	On-site: There are no significant changes in use. Off-site: Gas Works Road shown in current day configuration.
1900	On-site: There are no significant changes in use. Off-site: There are no significant changes in use.
1912	On-site: There are no significant changes in use. Off-site: There are no significant changes in use.
1931	On-site: There are no significant changes in use. Off-site: There are no significant changes in use.
1938	On-site: There are no significant changes in use. Off-site: There are no significant changes in use.



1948 (Aerial Image)	On-site: There are no significant changes in use.
	Off-site: There are no significant changes in use.
1956	On-site: The railway sidings associated with the biscuit factory are no longer shown and a conveyor is shown in their place.
	Off-site: Gas works are no longer shown on the map.
1962	On-site: The biscuit factory building now covers approximately 95% of the site.
	Off-site: The biscuit factory has been extended south of Gas Works Road and occupies the former gas works and steam sawmill site.
1968	On-site: There are no significant changes in use.
	Off-site: There are no significant changes in use.
1979	On-site: There are no significant changes in use.
	Off-site: There are no significant changes in use.
1990	On-site: Part of the large factory building remains but the factory is no longer shown on the map.
	Off-site: Wider biscuit factory is no longer shown on the map.
1993	On-site: The site is shown in its current day configuration.
	Off-site: The Alpha (Kennet Place) and Beta buildings are showing directly to the west of the site.
2009	On-site: There are no significant changes in use.
	Off-site: There are no significant changes in use.
2013	On-site: There are no significant changes in use.
	Off-site: There are no significant changes in use.
2025	On-site: There are no significant changes in use.
	Off-site: There are no significant changes in use.

Key Findings

The site has been previously occupied with a biscuit factory and buildings associated with the former gas works including coal storage and retort houses, before becoming solely a biscuit factory following demolition of the gas works in Ca.1956. All buildings were demolished Ca.1990, the site then resembled its current day configuration Ca.1993. Based upon the historical map review, there is some potential for historical sources of contamination upon the site.

2.4 Landfilling Activities

Table 5 provides a summary of available records of landfilling at the site based on Environment Agency public records and the Environmental Data Searches. This includes registered landfills, as well as historical records of informal land filling activities, which may affect the site.



Table 5 - Landfilling Activities

Activity	Records within 250m of the site
Historic Landfill Sites (all available records)	0
Other Potentially Infilled Land (e.g. infilled ponds, streams, embankments)	0
Operational/Permitted Landfills	0

Key Points

There are no recorded landfills (historical or active) within 250m of the site.

2.5 Regulatory Permits & Licences

Details of permitted or licensed activities, either on or within the vicinity of the site, can indicate whether there are environmental risks posed to the property, or whether previous licenced activities may have resulted in environmental impact at the site. Details of permits and licenses have been obtained from the Environmental Data Searches, as well as on-line Environment Agency public records. A summary is presented in Table 6.

Table 6 - Licenses and Permits

Activity	On-site	Entry within 250m of the site
Industrial sites holding licenses or authorisations*	0	0
Sites with dangerous or hazardous substances**	0	0
Discharge consents	0	3
Sites determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990	0	0
Petrol and fuel sites	0	0
Gas pipelines	0	0
Groundwater/surface water/potable water abstraction licenses	0	0
Private Water Supply abstractions (unlicensed)***	N/A	N/A
Other waste sites such as treatment, transfer or disposal (non-landfill)	0	0

*Including Environmental Permits, and Local Authority Pollution Prevention & Controls.

**Including Control of Major Hazard (COMAH); Historic records under the now revoked Notification of Installations Handling Hazardous Substances (NIHHS) Regulations, 1982 (and amendments); Explosives Sites; Planning Hazardous Substance Consents & Enforcements and registered radioactive substances.

***Using information available from Reading Borough Council

1. Discharge Consents

- i. Seven discharge consents within 250m of the site have been identified. However, these are all identified as "revoked".



Key Points

No regulatory permits or licences have been identified for the site. Based upon the review of environmental records, no permitted or licensed activities with the potential to adversely impact the environmental condition of the site have been identified.

2.6 Pollution Incidents

There are thirty recorded pollution incidents to controlled waters within a radius of 250m of the site. These incidents comprised "Category 3 – Minor Incident" with pollutants classified as "Oils -Unknown", "Miscellaneous – Unknown", "Miscellaneous – Other", "Chemicals – Unknown" or "General". The incidents are dated between 1989 1998.

Key Points

There are no recorded pollution incidents associated with the site. There are thirty recorded pollution incidents within 250m of the site. However, based upon their classification as "minor incidents" and the significant age of the incidents, the potential for these incidents to have adversely affected the site is low.

2.7 Designated Protected Sites

Sensitive land uses include areas designated by the Environment Agency as Sites of Special Scientific Interest ("SSSI"), Local Nature Reserves, Ramsar sites and Special Areas of Conservation ("SAC") etc. There are none of these features recorded within a radius of 1km of the site.

Key Points

There are no designated Protected Sites within the vicinity of the property which are likely to be impacted by current or future site activities.

2.8 Hydrology & Site Drainage

The nearest surface water feature is River Kennet located 6m north of the site.

In the absence of any third-party drainage surveys, it is not possible to comment on the connectivity of the site's drainage systems with off-site drainage infrastructure and/or surface waters.

2.9 Local Authority Searches

In December 2024, a request was made to Reading Borough Council Environmental Protection Team for any information pertaining to the contamination status of the site of the adjacent building Kennet Place (The Alpha Building), 121 Kings Road, Reading, RG1 3ES. The response is provided in Appendix C, and key information is reproduced as follows:

- *"The site has been identified by Reading Borough Council as being potentially contaminated due to its former use as a Gas Works and the Extensive Sidings to the former Biscuit Factory."*



- *"The site has been identified for future investigation under the Council's Part IIA inspection strategy. In the sites current commercial use, the site is currently classified as a low risk. Due to the former use, planning applications would be expected to be accompanied by a phase I assessment to check the risk to future users of the site."*
- *"The Council's Part 2A prioritisation or reprioritisation of a site would be carried out when any new evidence of contamination at a site emerges. There are no plans to carry out a prioritisation exercise other than this in the near future."*
- *"The Council holds no records of any remediation which may have taken place on this site."*

Key Points

The historical map review undertaken as part of this assessment has confirmed that the site was occupied by a biscuit factory and a gasworks prior to that.



3 Subsurface Site Environment

3.1 Geology

An overview of the site geology has been inferred from British Geological Survey ("BGS") 1:50,000-scale mapping for artificial, superficial and bedrock deposits. Where available and relevant we have also included additional information from BGS archive borehole records and the findings of third-party reports.

	BGS Description	Additional Information
Artificial Deposits	The BGS mapping does not show any artificial deposits beneath the site.	No relevant additional information available.
Superficial	The BGS mapping shows Alluvium superficial deposits beneath the site described as clay, silt, sand and gravel.	No relevant additional information available.
Bedrock	The bedrock geology comprises Seaford Chalk Formation and Newhaven Chalk Formation (Undifferentiated) described as Chalk.	No relevant additional information available.

3.2 Groundwater Resources & Hydrogeology

The presence and status of any known groundwater bodies beneath or within proximity to the site, are presented below.

Superficial Geology	These deposits are classified as a Secondary (A) Aquifer - these aquifers are capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.
Bedrock Geology	These deposits are classified as a Principal Aquifer, meaning the aquifer may support water supply and/or river base flow on a strategic scale.

The intrinsic groundwater vulnerability beneath the site is classified by the EA as Medium-High - this means groundwater is regarded as a high priority resource with limited natural protection.³ This risk category takes into consideration the likelihood of a pollutant reaching the groundwater, the type of aquifers present (e.g. superficial or bedrock) and the sensitivity of those aquifers. The classification is precautionary and provides the most vulnerable class from either the superficial or bedrock aquifer within a 1km² area.

The site is not located within a groundwater Source Protection Zone (SPZ).

³ Based on the *simplified* groundwater vulnerability mapping. Note that the maps provide intrinsic vulnerability and therefore the vulnerability classification does not take into account any site-specific information such as current or intended activities or the specific characteristics of pollutants which may be present. The vulnerability assessment is based on how pollutants released **at the soil surface** by an activity are transported down to the water table taking into account protective layers and properties; the assessments do not consider the release or existing presence of pollutants beneath the soil surface.



Key Points

The intrinsic groundwater vulnerability beneath the site is classified by the EA as Medium-High – this means groundwater is regarded as high priority resource with very limited natural protection. The superficial geology beneath the site is classified as a Secondary (A) Aquifer and the bedrock geology is classified as a Principal Aquifer. However, the site is not located within a groundwater SPZ and there are no recorded drinking water abstractions within the vicinity of the site (refer to Section 2.6).

3.3 Ground Stability Hazards

Important Note: The following information does not constitute a full appraisal of the geotechnical bearing properties of the soils underlying the site. In the event of any future development taking place on the site the developer would be responsible for undertaking the necessary investigation to satisfy themselves and the regulatory authorities that the ground conditions and foundation solutions being proposed are fit for purpose.

3.3.1 Natural Subsidence Susceptibility

Natural subsidence hazards reported within the Environmental Data Searches are summarised in Table 7.

Table 7 - Natural Subsidence Hazards

Subsidence Mechanism	Hazard Potential
Collapsible deposits	Negligible (No Hazard)
Compressible soils	Moderate
Dissolution	Very Low
Slope instability	Very Low
Sand wash-out	Low
Shrink-swell clays	Very Low
All other mechanisms	Low

Key Points

The main cause of subsidence in the UK is the shrinkage in dry weather of clay soils which expand and contract with changes in their moisture content. The BGS natural subsidence hazard data indicates that the property is in an area of Very Low susceptibility to shrink-swell subsidence. The highest hazard rating for all other natural subsidence hazards within the vicinity of the site is Moderate.

3.3.2 Mining Related Subsidence

Coal Mining

Reference to the Coal Authority Interactive Map View indicates that the site is not within a coal mining reported area.

Other Mining and Quarrying

No other non-coal mining or quarrying has been identified within the immediate vicinity of the site.



Key Points

No mining activity is recorded for the site or within the surrounding area and as such there is no potential for associated environmental impacts.

3.4 Ground Gas

Common sources of hazardous ground gases include:⁴

- Made ground
- Infilled ponds
- Underlying natural strata (e.g. alluvial peat, chalk, worked coal measures)
- Off-site landfills

There is no evidence of typical ground-gas generating sources beneath the site.

Based upon the available information the ground gas generation potential on the site is estimated to be Very Low.⁵

3.5 Radon Potential

The potential for Radon hazard at the property has been assessed using the Definitive Radon Potential Map for Great Britain and Northern Ireland, created jointly by Public Health England (PHE) and the BGS. The map uses long-term radon measurements made in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological map data.

The site is not within a Radon Affected Area and is at low risk from Radon gas (less than 1% of properties are above the Action Level). No radon protection measures are required by Building Regulations (England & Wales).

3.6 Unexploded Ordnance

Ashfield has consulted the online ZeticaUXO Unexploded Bomb (UXB) risk maps. The maps provide a high-level indication of the potential for UXB to be present because of World War Two (WWII) bombing and is intended to help inform whether further, more detailed research, by a UXO specialist is required. The database used for the mapping includes records from the central government (National Archives), local authority archives, the Ministry of Defence, and the German Luftwaffe.

The site is situated within a low-risk region (bombing density <10 per 1,000 acres). In general, should the site be redeveloped, further action is not necessary.

⁴ Wilson, et al. 2007. Assessing Risks Posed by Hazardous Ground Gases to Buildings. CIRIA C665.

⁵ BS8576:2013 Figure 6 – Decision Matrix for Initial Monitoring.



4 Preliminary Risk Assessment

4.1 Introduction

This section provides a preliminary risk assessment for potential land contamination present at the site. The assessment of risk from land contamination in the United Kingdom is based around the development of a Conceptual Site Model (CSM). Where no ground investigation information is available for a site, the CSM is usually limited to basic desk-based information. The aim of the initial, or outline, CSM is to support the identification of plausible relationships between potential contaminants at a site, pathways by which those contaminants may migrate, and receptors which may be impacted by contaminants (such as people or sensitive groundwater). All three components must be present for there to be a viable contaminated land risk: a Contaminant, a Pathway and a Receptor.

- Contaminant – Contamination that has the potential to impact human health and/or the environment;
- Pathway – The route by which the contaminant may come into contact with human health or the environment; and
- Receptor – Receptors are typically humans or the environment (e.g. water resources) that could be affected by the contamination.

If a plausible CPR linkage is present, then the degree of risk is assessed using a tiered risk-based approach. A Preliminary Risk Assessment (PRA) defines whether there are plausible pollutant (CPR) linkages present; and uses a qualitative approach to evaluate whether there is a potential risk which may require further investigation or mitigation. At the PRA stage, subjective terms (e.g. low to high) are used to describe the estimation of risk.

Note: There is no statutory definition of what constitutes, for example, a low or high risk – these are subjective terms, and different stakeholders may have different perceptions of risk.

Where a PRA has determined that further works are required, this normally comprises one or more phases of intrusive site investigation followed by additional tiers of generic- and detailed-quantitative risk assessment.

It is important to note that the overall risk assessment process is often an iterative one – more detailed assessment may raise issues that require earlier tiers to be revisited. The process within each tier may also be iterative, especially when information is evaluated, and gaps are identified in the knowledge needed to make a particular decision. In this case, approaches taken earlier within the tier may need to be reappraised.

In this assessment a PRA has been undertaken using qualitative approaches to establish the overall risk posed by the site in the context of a proposed residential (without gardens) end-use.

4.2 Pollutant Linkage Assessment

The context of our assessment is that the site is to continue being used in its current form. In our pollutant linkage assessment, we have considered specific areas of the site where contamination may be present as well as more 'general' conditions, typical of brownfield or industrial sites.



Potential Contamination Sources	
On-site	CONTEMPORARY: No current sources of contamination have been identified. HISTORICAL: The site formed part of a wider biscuit factory from Ca.1877-1990. Given the historical land use involved the processing and manufacture of food products, the potential for significant contamination associated with the biscuit factory is considered to be low. There is some potential for asbestos contamination of shallow soils associated with its usage in historical factory buildings. Buildings associated with a gas works including coal stores and retort houses occupied the site between Ca.1877-1956. Typical contamination associated with gasworks includes tar, hydrocarbons, PAHs, heavy metals, cyanide and ammonia. However, as described further below the likelihood of significant contamination remaining beneath the site is low.
Off-site	CONTEMPORARY: No current sources of contamination have been identified. HISTORICAL: The wider gas works extended approximately 50m east of the site. The area surrounding the site has been predominantly residential and commercial use.

Potential Receptors	
Human Health	Site Occupiers – proposed residential (no gardens) end use. Third Parties (i.e. neighbours). Maintenance and construction workers.
Controlled Waters	Groundwater Resources – Principal Bedrock Aquifer and Secondary (A) Superficial Aquifer. The site is not situated within a groundwater SPZ and there are no recorded groundwater abstraction licenses within the vicinity of the site. Surface Water – The River Kennet is located 6m north of the site.
Built Environment	Buildings and buried services.
Ecological Systems	None identified.

Potential Pathways & Pathway Viability	
Human Health	Negligible to low potential for ingestion, inhalation and/or dermal contact from contaminated soil and dust. Negligible potential for ingestion of vegetables and soils attached to home grown produce. Low potential for permeation of potable water supplies. Low potential for inhalation of vapours from contaminated soils or groundwater.
Controlled Waters	Groundwater as receptor – Low potential for leaching from contaminated soils and migration to underlying groundwater; migration to wider aquifer and to abstractions where present. Surface Waters & Dependant Ecosystems – Low potential for migration of groundwater contamination to identified surface waters including prior leaching from contaminated soils.
Built Environment	Low potential for preferential pathways along existing or abandoned services, drains, conduits, boreholes, etc. Low potential for damage via contact with building materials.



4.3 Preliminary Risk Classification

The overall land contamination risk estimation in the context of the proposed redevelopment of the site is *Low*.

This overall classification is based upon the following key factors:

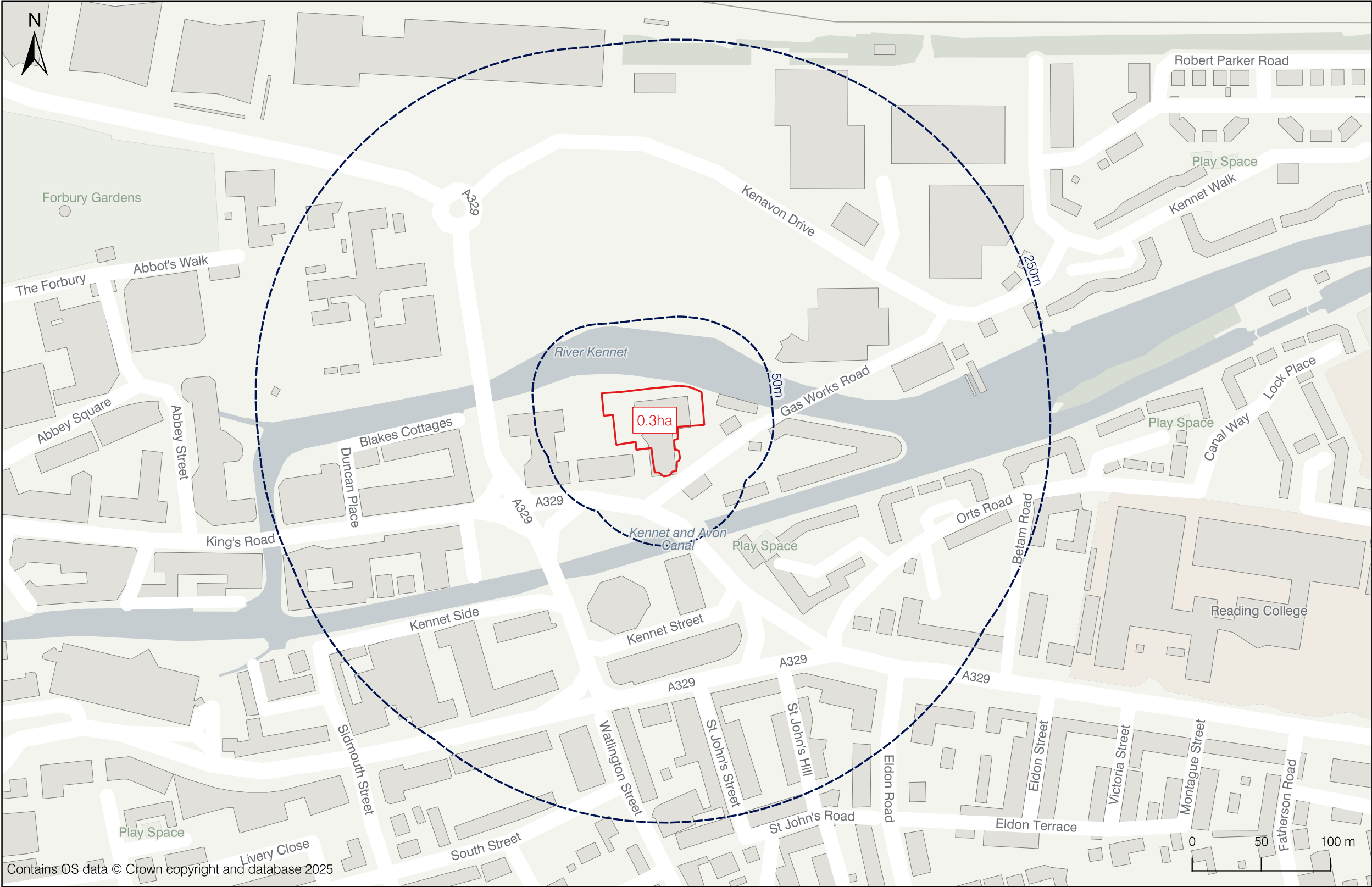
- There are no notable potentially contaminative land uses associated with the property's current or recent use. The property has been in its current configuration for over 30 years and no concerns have been raised regarding its environmental condition.
- The site was formerly occupied by a wider gasworks that extended off site to the east. Typical contamination associated with gasworks includes tar, hydrocarbons, PAHs, heavy metals, cyanide and ammonia. However, the current day building has been constructed with a basement car park of significant depth which is understood to extend beneath the entirety of the building's footprint. On this basis, it can be reasonably assumed that any contamination would have been removed from site as part of the basement construction dig.
- The potential for residual contamination sources if present to affect the building and its future residential users is very low. The site is almost entirely covered by hardstanding which will act as a barrier to human exposure. Furthermore, the presence of a well-ventilated basement will preclude the potential for vapours to enter the residential dwellings above.
- Historically, the wider gas works extended 50m east of the site between Ca.1877-1957. As above, the widespread presence of hardstanding across the study site and basement level carpark will preclude the potential for exposure to off-site contamination sources.
- The property is underlain by potentially sensitive groundwater resources. However, there is a low potential for historical mobile sources of contamination beneath the site which is covered almost entirely by hardstanding which will preclude the potential for infiltration and mobilisation of contamination (if present) into the aquifer.
- There are potentially sensitive surface water features adjacent to the property. However, the potential for the site to affect surface waters is low.
- The property is not within a Radon Affected Area and no protection measures are required in the proposed development.
- There is no evidence of ground gas generating sources beneath or within the vicinity of the property.

4.4 Recommendations

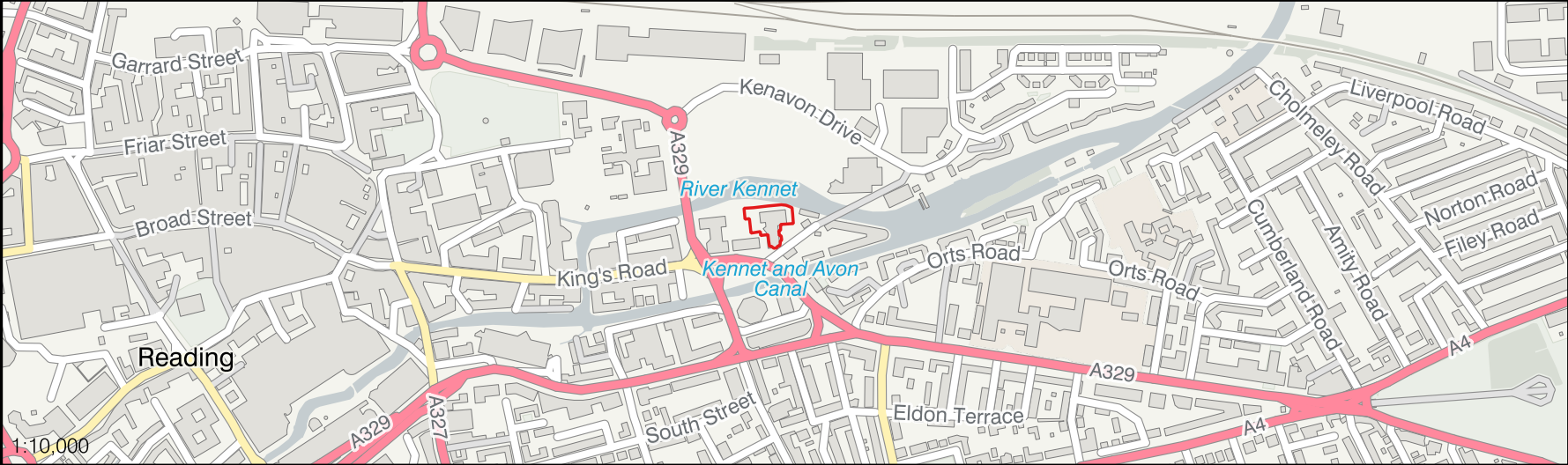
- This assessment has not identified any plausible pollutant linkages associated with the proposed change in use of the existing building for residential dwellings (no gardens). As such, there is no requirement for further contaminated land assessment.



Drawings



- Legend
- Indicative Site Boundary
 - Site Boundary Buffer (50 & 250m)
 - Site Location



Client			London Two Limited		
Project			The Delta Building, 121 Kings Road, Reading, RG1 3ES		
Title			Site Location Plan		
Report No.	214225-S01	Drawing No.	01	Revision	-
Scale	1:3,000	Date	17/01/2025	Frame Size	A3
Produced by	LC	Drawn by	LC	Approved by	LB
ASHFIELD — SOLUTIONS GROUP —					



Map Data: Google © 2025
Contains OS data © Crown copyright and database 2025

Legend

Indicative Site Boundary

Client

London Two Limited

Project

The Delta Building, 121 Kings Road,
Reading, RG1 3ES

Title

Site Layout

Report No.

214225-S01

Drawing No.

02

Revision

-

Scale

1:500

Date

17/01/2025

Frame Size

A3

Produced by

LC

Drawn by

LC

Approved by

LB



Appendices



Appendix A

Environmental Data Reports



Appendix B

Site Photographs



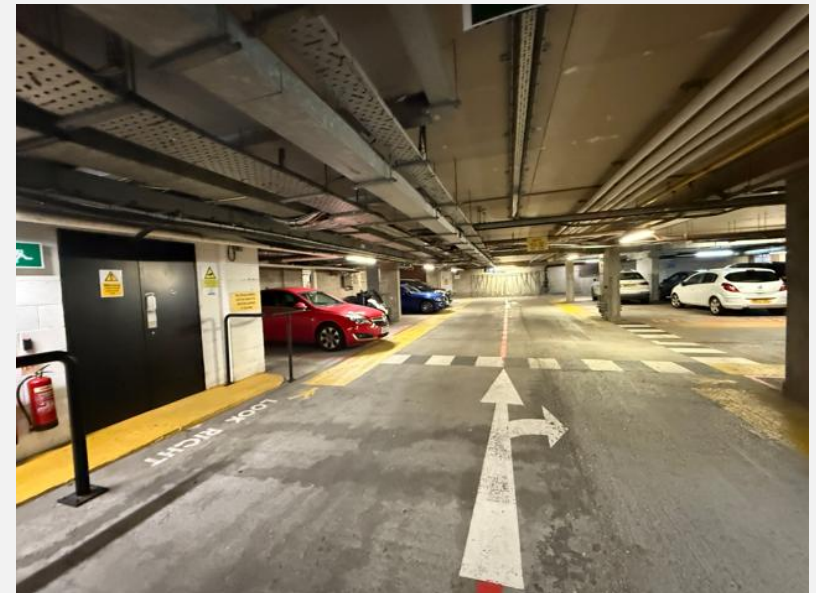
1



2



3

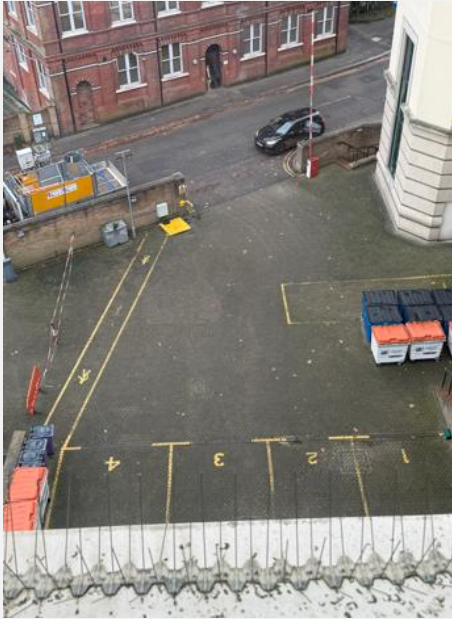


4

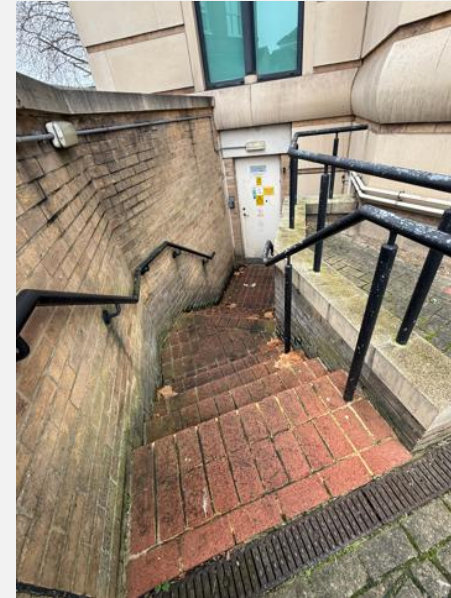
- 1 View of rear of property.
- 2 External view of property.
- 3 View of courtyard from rear of property.
- 4 Basement level carpark.



5



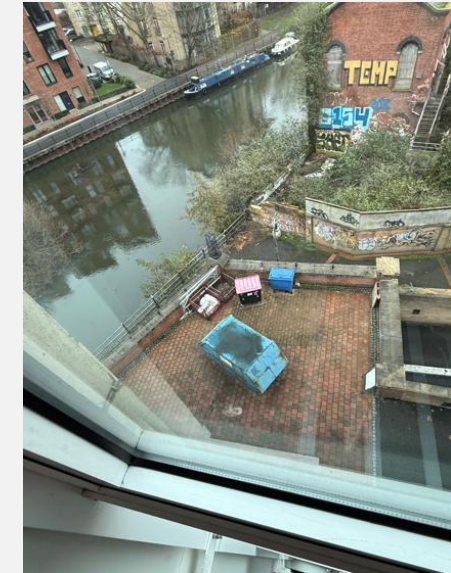
6



7



8



- 5 Vehicular access from Gas Works Road and waste bin area.
- 6 External access to high voltage switch room.
- 7 Air conditioning access via basement carpark level.
- 8 A skip located at the rear of building near access to basement carpark.





Appendix C

Local Authority Searches

Scott Ratcliffe

Our Ref: PR202412-965210

Direct: ☎ 01189 373987
e_mail:
harrison.balchin@reading.gov.uk

Date: 05/12/2024

Your contact is: Harrison Balchin - Environmental Protection & Nuisance

Dear Scott Ratcliffe,

ENVIRONMENTAL INFORMATION REGULATIONS 2004

RE: Environmental Information Request: 121 KINGS ROAD, READING, RG1 3ES

I write with reference to your recent request for environmental information in relation to the above site. A search of records held at Reading Borough Council has found the following:

1. The site has been identified by Reading Borough Council as being potentially contaminated due to its former use as a Gas Works and the Extensive Sidings to the former Biscuit Factory.

easting	northing	site_name	start_date	end_date
472400	173440	Gas Works	pre 1879	1931-1957
472350	173560	Extensive Sidings To Biscuit Factory	pre 1879	1931-1973

2. The site has been identified for future investigation under the Council's Part IIA inspection strategy. In the sites current commercial use, the site is currently classified as a **low** risk. Due to the former use, planning applications would be expected to be accompanied by a phase I assessment to check the risk to future users of the site.
3. The Council's Part 2A prioritisation or reprioritisation of a site would be carried out when any new evidence of contamination at a site emerges. There are no plans to carry out a prioritisation exercise other than this in the near future.
4. The Council holds no records of any remediation which may have taken place on this site.

The information in this letter is given on the understanding that the Council accepts no liability for the use to which it is put and gives no guarantee as to the state of the land in question.

The information given represents the position within the Environmental Health database at the date of this letter and the Council can give no guarantee as to the impact of any future events in relation to the site in question.

If you would like to discuss the contents of this letter further, I can be contacted on 01189 373987.

Yours sincerely,

Harrison Balchin
Technical Officer
Environmental Protection & Nuisance



Thank you

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