



Remediation Strategy and Verification Plan

Starwood House
Avenue One
Letchworth Garden City
Hertfordshire
SG6 2TT

March 2026

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Remediation Summary

Aspect	Remediation Requirement
Underground Storage Tank	Removal of tank, cradle and any surrounding contaminated soils from Site
	Verification of excavation sides and base to confirm that source zone soils are removed
	Backfill excavation with clean imported or site derived crushed aggregate
Potential Remediation of Historic Soakaways	Trial pit investigation and environmental soil sampling of north west corner to investigate the presence of a historical soakaway and any associated pipework
	If historical soakaway or evidence of contamination is encountered, remediation works to remove soils and structures that could pose ongoing risk to human health and controlled waters
	Verification of excavation sides and base to confirm that source zone soils are removed
	Backfill excavation with clean imported or site derived crushed aggregate
Soil	Implement discovery strategy to ensure potential unidentified contaminant sources are identified and addressed if encountered
	Provision of clean soil in areas of soft landscaping
	Testing of imported materials used as landscaping
	Installation of geotextile marker membrane at base of clean imported soil
Groundwater	One round of monitoring via Arcadis monitoring wells (if present) or newly installed replacement monitoring wells
	Installation of one new monitoring well in northwest corner and one round of groundwater monitoring
	Decommissioning of existing monitoring wells
Water supply Pipework	Subject to confirmation by local water supply company
	Installation of upgraded water supply pipework if required

1.0 Introduction

1.1 Appointment and Purpose

TRC Companies Limited (TRC) was commissioned by Letchworth Investment LLP (the 'Client') to prepare a Remediation Strategy and Verification Plan for the development located at Starwood House, Avenue One, Letchworth Garden City, Hertfordshire, SG6 2TT (hereafter referred to as the 'Site').

A site location plan is provided as Figure 1 in Annex A.

The development has been granted planning permission by North Hertfordshire District Council (Ref: 25/01196/FP). The purpose of this document is to support the commencement of the development works and address data requirements to satisfy the following pre-commencement planning conditions. This document has been updated following pre-application advice received from Environment Agency (EA) under their paid advice service.

Pre-commencement conditions that this document intends to address are as follows:

Condition 10:

No development approved by this planning permission, other than demolition of the existing building on site, shall commence until a Remediation Strategy to deal with the risks associated with contamination of the site in respect to the development hereby permitted, has been submitted to and approved, in writing, by the Local Planning Authority. This strategy will include the following components:

- 1. A preliminary risk assessment which has identified: all previous uses, potential contaminants associated with those uses a conceptual model of the site indicating sources, pathways and receptors potentially unacceptable risks arising from contamination at the site.*
- 2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.*
- 3. The results of the site investigation and detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.*
- 4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer term monitoring of pollutant linkages, maintenance and arrangements for contingency action.*

Condition 12:

The development hereby permitted shall not commence save for demolition to slab level and site clearance works, until a monitoring and maintenance plan in respect of contamination, including a timetable of monitoring and submission of reports to the local planning authority, has been submitted to, and approved in writing by, the local planning authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to, and approved in writing by, the local planning authority.

Condition 15:

Piling or other foundation or ground improvement designs using penetrative methods shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved details.

Condition 16:

No development, save for demolition and site clearance to slab level approved by this permission shall take place until a Phase 2 investigation report, as recommended by the previously submitted TRC Companies Ltd report dated March 2025 (Ref:631621.0000.0000), has been submitted to and approved in writing by the Local Planning Authority. Where found to be necessary by the phase 2 report a remediation strategy to deal with the risks associated with contamination of the site shall also be submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall include an options appraisal giving full details of the remediation measures required and how they are to be undertaken. The strategy shall include a plan providing details of how the remediation works shall be judged to be complete and arrangements for contingency action.

TRC Note that Condition 10 relates to controlled waters risks and is an EA required pre-commencement condition. Whereas Condition 16 relates to human health risks and is a requirement of the Local Authority Contaminated Land Officer.

This report has been prepared by a competent person in accordance with LCRM (2025).

1.2 Proposed Development

The proposed development will comprise the demolition of the existing structures and the construction of two buildings comprising three units with associated service yards and car parking, as well as some limited soft landscaping near the Site boundaries. The development has been granted planning permission by North Hertfordshire District Council (Ref: 25/01196/FP).

A proposed development plan is presented as Figure 2 in Annex A.

1.3 Guidance and Standards

This report was conducted with due regard to the following guidance and standards:

- The National Planning Policy Framework;
- Land Contamination: Risk Management (LCRM) 2020 (Updated 2025);
- CL:AIRE (2016) CAR-SOIL™ Control of Asbestos Regulations 2012 Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials: Industry Guidance;
- CIRIA 809 (2023) Sustainable management of surplus soils and aggregates from construction;
- CL:AIRE (2011) The Definition of Waste: Development Industry Code of Practice (DoWCoP);
- EA (2021) WM3 Guidance on the classification and assessment of waste (1st Edition v1.2.GB);
- NCLOG (2024) A Regulator's Guide to Cover Systems and their Verification;
- CL:AIRE (2025) Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention.

In line with good practice the principles of sustainable remediation will be incorporated and considered as part of the remediation options appraisal in line with guidance published by the Sustainable Remediation Forum UK (SuRF-UK).

Sustainable remediation is based on the following six core principles:

- Protection of human health and the wider environment.
- Safe working practices.
- Consistent, clear and reproducible evidence-based decision making.
- Record keeping and transparent reporting.
- Good governance and stakeholder involvement.
- Sound science.

1.4 Significant Assumptions

This Remediation Strategy presents TRC's observations, findings, and conclusions as they existed on the date that this report was issued. This report is subject to modification if TRC becomes aware of additional information after the date of this report that is material to its findings and conclusions.

The reliability of information provided by others to TRC cannot be guaranteed to be accurate or complete. Performance of this Remediation Strategy is intended to reduce, but not eliminate, uncertainty of environmental conditions associated with the Site; therefore, the findings and conclusions made in this report should not be construed to warrant or guarantee the Site, or express or imply, including without limitation, warranties as to its marketability for a particular use. TRC found no reason to question the validity of information received unless explicitly noted elsewhere in this report.

1.5 User Reliance

This report was prepared for Letchworth Investment LLP. Reliance on the Report by any other third party is subject to requesting and fully executing a reliance letter between TRC and the third party that acknowledges the TRC Standard Terms and Conditions with the Client, to the same extent as if they were the Client thereunder.

TRC has been provided with information from third parties for information purposes only and without representation or warranty, express or implied as to its accuracy or completeness and without any liability on such third parties part to revise or update the information. Where reliance has been provided by third parties to potential purchasers this is noted in our report.

2.0 Site Summary

2.1 Site Details

Table 2.1: Summary of Site Details

Site Address	Starwood House, Avenue One, Letchworth Garden City, Hertfordshire, SG6 2TT
Grid Reference	Easting 523280, Northing 232950
Approximate Size	2.59 ha
Site Location	The Site is located at Starwood House, Avenue One, Letchworth Garden City, Hertfordshire, SG6 2TT, situated approximately 1.5km east from Letchworth Garden City railway station.
Current Site Use	At the time of writing this assessment, demolition contractors had recently completed the decommissioning and removal of equipment and interior walls of the building on site. The Site comprises car parking in the north-eastern portion of the Site. Soft landscaping is present around the perimeter of the Site

2.2 Summary of Adjacent Land Uses

Land uses in the immediate vicinity include the following principal features:

Table 2.2: Summary of Surrounding Land Use

Direction	Land Use
North	The Site is bound to the north by adjacent large warehouses and associated car park with hardstanding.
East	The Site is bound to the east by Third Avenue and a Sainsbury's superstore with associated petrol filling station, car park and hardstanding.
South	The Site is bound to the south by Second Avenue and beyond this are various industrial/commercial properties.
West	The Site is bound to the west by Avenue One and by large industrial/commercial warehouses with associated hardstanding to the southwest. To the northwest, a builder's merchants yard is present.

2.3 Summary of Site History

From earliest available mapping (1880), the Site comprised agricultural fields. In the 1930s the Site is part of larger sports fields. By the 1960s, infrastructure associated with the adjacent "Metal Works" and a tank overlaps within the site boundary.

By the early 1980s, the Site was redeveloped to contain two new buildings and associated tanks. By the late 1980s and early 1990s, the Site was redeveloped again to a data centre with offices and an associated car park, reflecting its current land use.

2.4 Summary of Environmental Setting

2.4.1 Geology and Hydrogeology

Table 2.3: Summary of Geology and Hydrogeology

Strata	Description	Aquifer Classification
Made Ground	Brown, slightly clayey, slightly silty sandy GRAVEL or gravelly SAND, with inclusions of wood, plastic, bitumen, and glass	Not Classified
Made Ground – Reworked Natural	Brownish greyish white slightly clayey silty SAND with rare inclusions of wire and wood.	Not Classified
Glaciofluvial Deposits	Orangish brown slightly gravelly very silty SAND.	Unproductive Strata
Bedrock Deposits - (Holywell Nodular Chalk Formation and New Pit Chalk Formation)	Structureless Chalk composed of cream with rare orange staining, slightly gravelly sandy clayey SILT.	Principal Aquifer

2.4.2 Groundwater

During the TRC ground investigation and follow-on monitoring, groundwater was not encountered. In the previous investigation undertaken by Arcadis it was encountered at depths between 19.07m bgl to 24.23m bgl within the Holywell Nodular Chalk Formation and New Pit Chalk Formation.

Groundwater may be subject to seasonal variations especially after periods of prolonged rain or drought.

2.5 Previous Environmental Assessments, Investigations or Remediation

Summaries of the previous assessments are detailed in Table 2.4.

Table 2.4: Summary of Previous Site Assessments

Report Details	Summary of Geoenvironmental Findings
“Tesco Starwood House, Letchworth – Phase 1 Environmental Site Assessment”, Version 1, January 8 th 2024, Arcadis	The report concluded that there has been limited notable potentially contaminative development across most of the Site from earliest available mapping. There were previous industrial buildings relating to the steel and metal works as well as the traveling crane located on Site. The report noted two underground storage tanks, which were decommissioned in 2017, but were understood to contain diesel fuel. One of the decommissioned tanks was removed from Site, but the other remained onsite. The report concluded that several off-site land uses represent potential sources of contamination, including industrial and commercial land uses around the vicinity of the Site. Arcadis undertook soil sampling on the Site in 2017 during the tank decommissioning process; however, this was limited to testing of stockpiles and excavation of the underground storage tank from the north of the Site. The data results concluded that there were no elevated concentrations of hydrocarbons above the Arcadis’ general assessment criteria protective of Human Health and Controlled

Report Details	Summary of Geoenvironmental Findings
	Waters. No other known historical environmental investigations have been undertaken at the Site. The report stated that the Site is located within Source Protection Zone (SPZ) 1. The report concludes that groundwater within the bedrock geology of Holywell Nodular Formation and New Pit Chalk Formation are classified as a Principal Aquifer. The report also noted a potable water abstraction located 261m south of the Site. Arcadis recorded that two Underground Storage Tanks (UST) were present in the northwest of the Site associated with the storage of diesel to supply backup generators for the datacentre. Whilst both have been decommissioned, only one is recorded as being removed. It is understood that the second could not be removed due to buried utilities and site constraints. Arcadis reported that verification sampling during the UST removal confirmed no contamination of concern that would trigger a requirement for remediation. It is hypothesised that similar ground conditions will be encountered under the decommissioned tank that remains in-situ given the similar age and use to the one removed.
“Geo-environmental Ground Investigation Report”, Version 1, April 2024, Arcadis	The scope of works for the intrusive investigation included: • Concrete coring of all proposed drilling locations; • Hand pitting to 1.20m below ground level prior to drilling; • Drilling of 3 no. dynamic sampling/rotary drilling boreholes up to 30m below ground level (bgl) with in-situ geotechnical testing; • Collection of soil samples at regular intervals for environmental and geotechnical laboratory testing; • Development of newly installed monitoring wells; • Groundwater monitoring and sampling of all newly installed monitoring locations; and • Submission of groundwater samples for environmental laboratory testing. All three deep boreholes (BH101, BH102, BH103) reached a target depth of 30m bgl. Six more exploratory hole locations were abandoned at shallow depths while excavating the starter/inspection pits between 0.31m bgl and 1.04m bgl due to refusal on concrete obstructions. Groundwater monitoring wells were installed in each of the three successfully drilled boreholes. The geology encountered during the site investigation was Made Ground to a maximum depth of 1.45m bgl, which was underlain by very weak, light Chalk. The Holywell Nodular Chalk Formation and New Pit Chalk Formation (Undifferentiated) was encountered to a maximum depth of 30.00m bgl. Groundwater strikes were observed at 18.90m bgl in BH101. Groundwater was measured resting between 24.80m bgl (BH102) to 19.07m bgl (BH103) during the groundwater monitoring and sampling works. Groundwater monitoring found resting levels at depths from 19.07m bgl to 24.23m bgl. Soil samples were analysed for Total Petroleum Hydrocarbons (TPH) using the Criteria Working Group (CWG) method, fuel additives, pollutants regulated by the United States Environmental Protection Agency (US EPA), Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs), Contaminated Land Exposure Assessment

Report Details	Summary of Geoenvironmental Findings
	(CLEA) metals, Hexavalent Chromium (Cr(VI)), Sulfate (SO₄²⁻), a comprehensive Waste Acceptance Criteria (WAC) analysis, an asbestos screen, and pH levels. Groundwater samples were tested for TPH (CWG), PAHs, Volatile Organic Compounds (VOCs), CLEA metals, Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Methyl Tertiary-Butyl Ether (MTBE), Tertiary Amyl Methyl Ether (TAME), Diisopropyl Ether (DIPE), Tert-Butyl Alcohol (TBA), and Ethanol. The results of the Arcadis ground investigation recorded no evidence of organic contamination in the boreholes. No visual or olfactory evidence of contamination was observed in soil and groundwater samples collected from BH101, BH102, and BH103. No measurable thickness of LNAPL was observed in any of the groundwater samples collected. PID readings in all three boreholes were <1 ppmV. Asbestos Containing Material (ACM) was not detected in any of the Made Ground soil samples. A UXO Desk Study & Risk Assessment report, dated 21st December 2023 prepared by Zeteca for Arcadis, indicated 'low' UXO risk for the Site.
"Desk Based Geoenvironmental and Geotechnical Site Assessment", Version 2, March 2025, TRC Companies Ltd	The report can be summarised as follows: • The Site currently comprises a data centre with offices and an associated car park, with soft landscaping surrounding the Site. • Made Ground is expected at the Site due to past developments. Superficial deposits are not expected. Bedrock geology is anticipated to consist of Holywell Nodular Chalk Formation and New Pit Chalk Formation. • The bedrock geology is classified as a Principal Aquifer and is unconfined. • The Site lies within a groundwater SPZ 1. • Groundwater is therefore considered to be sensitive to contamination. • The nearest surface water feature is a small pond (Western Lake) located 38m northwest of the Site. Western Lake is situated higher in elevation than the Site; thus, Western Lake is unlikely to be in hydraulic continuity with groundwater beneath the Site. • Surface water is therefore not considered to be sensitive to contamination. • The Site is located within Flood Zone 1, which has a low probability of flooding. • Made Ground, tanks, and previous operations at the Site could be a source of asbestos fibres in soil, heavy metals, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, polychlorinated biphenyls, ground gases, and organic vapours. • Potentially complete contaminant linkages have been identified and are considered to pose a potential risk to the identified receptors.

Report Details	Summary of Geoenvironmental Findings
“Intrusive Geoenvironmental and Geotechnical Site Assessment”, Version 3, September 2025, TRC Companies Ltd	The scope of the site investigation was as follows: • 3 Cable Percussive boreholes to a maximum depth of 17 m below ground level (bgl) • 13 Windowless Sample boreholes to a maximum depth of 5 m bgl Soil samples were taken from each location, samples were analysed for heavy metals, hydrocarbons, chlorinated solvents, PFAS and asbestos. Asbestos was identified in two of the ten samples with a maximum quantification of 0.003% fibres which was recorded in shallow Made Ground. No other contaminants of concern were identified at significant concentrations. The risk to future site users was considered to be moderate due to the presence of asbestos in shallow soils. Ground gas and groundwater monitoring was undertaken at six locations on four occasions. No groundwater was encountered therefore soil leachate samples were submitted for analysis. Concentrations of naphthalene and phenanthrene were recorded marginally in excess of the Drinking Water Standards in one sample. Considering that leachate exceedances were recorded in only one sample of three tested, that only a thin layer of Made Ground was present across the Site, that groundwater is greater than 19m bgl, and that infiltration will be limited by the presence of buildings and hardstanding across the majority of the Site, the risk from soil leachates to the groundwater is considered to be low. The following remediation/ mitigation measures were recommended: • Construction of a clean cover layer across soft landscaped areas comprising a 300mm layer of clean materials with a geotextile membrane at the base. • Any works which have the potential to disturb asbestos must be undertaken in accordance with CAR 2012 and a Plan of Work will be required. An asbestos in soils management plan should be prepared to further assess risks associated with the asbestos in soils identified. In addition it was recommended that the selection of appropriate water supply pipework should be confirmed by the local water supply company.

2.6 Environment Agency Consultation

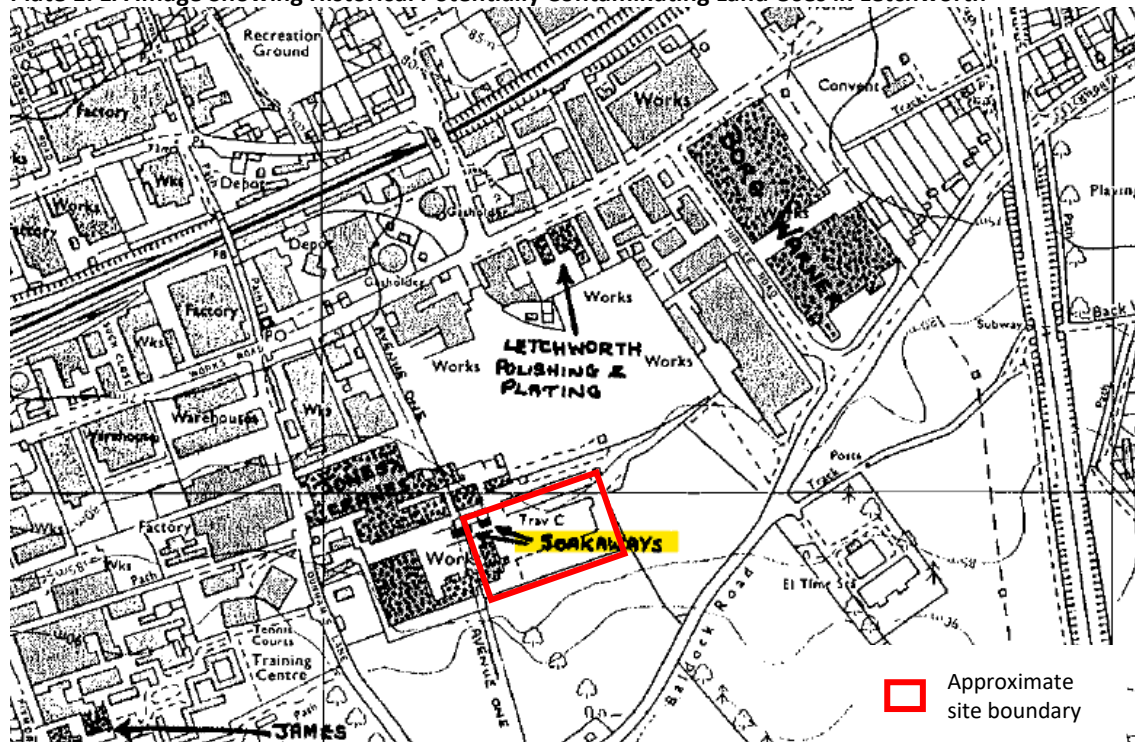
TRC has consulted with the EA as part of the planning process under the EA planning advice service. The aim of the consultation was to understand local groundwater conditions and EA investigations into contamination from historical industrial land uses. This data was required to ensure that the TRC assessments within the context of the proposed development pay due regard to wider EA studies and understanding of conditions within the chalk aquifer.

The EA considers the underlying chalk aquifer to have a high environmental sensitivity. The chalk is designated as a principal aquifer and the Site is located within a Source Protection Zone 1 associated with a groundwater abstraction located to the south of the Site.

The EA has knowledge that the potable supply borehole is potentially being impacted by contamination arising from historical industrial land uses in the local area. The EA has identified key contaminants to be heavy metals, hydrocarbon compounds, Volatile Organic Compounds (VOC) including chlorinated solvents and PFAS compounds (per and polyfluoroalkyl substances).

Plate 1 below is an image provided to TRC by the EA. This image shows historical potentially contaminative land uses that may present a potential risk to controlled waters.

Plate 1: EA Image Showing Historical Potentially Contaminating Land Uses in Letchworth

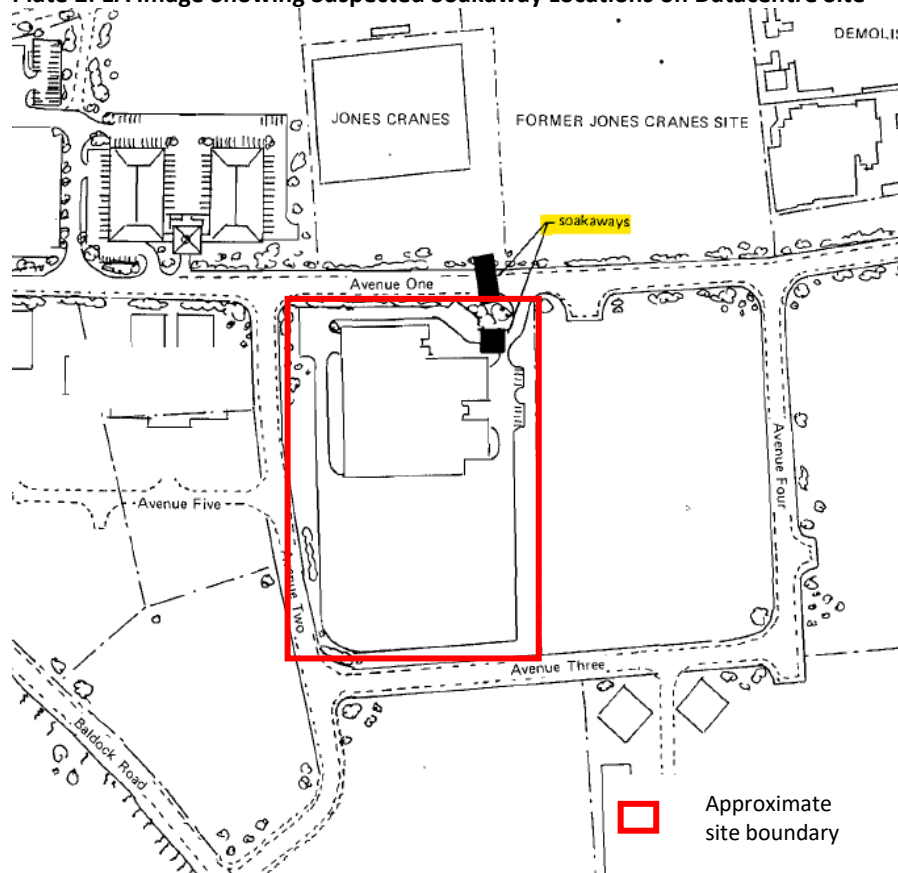


The image shows various historical potentially contaminative land uses in the locality of the Site. These include:

- Suspected historical soakaways that fall in part within the current Site boundary. These soakaways were associated with works operations prior to datacentre development;
- Jones Cranes manufacturing site;
- James Hayes Laundry;
- Letchworth Polishing and Plating Works;
- Borg Warner Works;
- Gasholders; and,
- Various unnamed works and factories locally.

Plate 2 below shows an enhanced view of the suspected historical soakaways which the EA were concerned were located within the site boundary. The EA understands that these soakaways were constructed for use as part of a metal works that were developed in the 1960's to the north of the Site and that encroached onto the north of the Site. The EA has no detail on the construction detail of the soakaways or their use. Its unconfirmed whether these were used for the disposal of clean surface water or whether industrial wastewaters could have entered the ground via these locations.

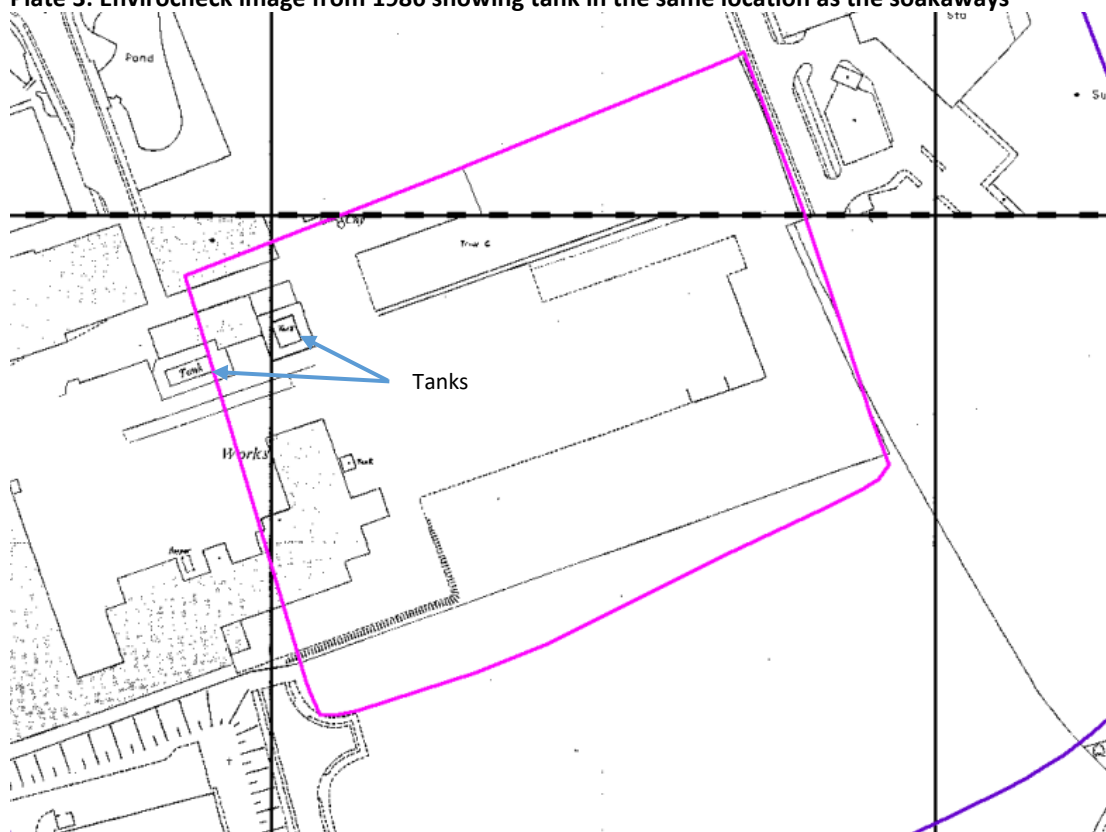
Plate 2: EA Image Showing Suspected Soakaway Locations on Datacentre Site



The precise location of the suspected soakaways is unknown. TRC note that the two soakaways are coincidental with tanks that are marked on historical maps dated 1986 as shown in Plate 3. These tanks would have been above ground features recorded by the survey and mapping record at that time. The presence of below ground infrastructure would not be recorded on these types of maps.

These tanks were not recorded as part of the datacentre development. It is therefore assumed that the tanks were removed during redevelopment from works to datacentre use.

Plate 3: Envirocheck image from 1986 showing tank in the same location as the soakaways



The TRC and Arcadis site investigations did not get full coverage of the northwest corner of the Site due to the presence of a service corridor and live utilities. Ground investigation data reported by TRC and Arcadis for this area did not detect evidence of significant concentrations of contaminants of concern in soils.

As summarised previously, TRC did not encounter groundwater during the previous ground investigation works. However, investigation work carried out by Arcadis in 2024 did encounter groundwater. At that time, Arcadis reported minor elevated concentrations of heavy metals and polycyclic aromatic hydrocarbons (PAH) only. No detectable concentrations of VOC, chlorinated solvents or hydrocarbons were reported within the samples collected. In addition no soil source was identified on the Site.

On this basis, TRC consider that the groundwater beneath the Site at that time was not significantly contaminated and therefore no further assessment or remedial action is required to protect controlled waters receptors. The characteristics of the groundwater do not appear to be similar to those conditions recorded in the EA groundwater monitoring data.

Whilst there may be localised hydraulic gradients, generally groundwater regionally would be expected to flow from north to south, towards where the potable water abstraction is located. As such, the EA boreholes are located up-hydraulic gradient and contamination at the EA monitoring locations may pose a risk to groundwater quality beneath the Site.

TRC recognise the importance of the wider EA study into groundwater quality, the data gaps regarding the potential presence of the historical soakaways, and the need for PFAS testing of groundwater at the Site. Further works will be undertaken as part of this Remediation Strategy to investigate and, if required, perform further risk assessment and remediation.

3.0 Remediation Drivers

3.1 Conceptual Site Model

The ground investigation performed at the Site by TRC identified asbestos fibres in soil, encountered in two of the Made Ground samples analysed, as well as being identified in previous investigations.

TRC consider that there is a low risk to Controlled Waters based on the site investigation data. However, consideration should be given to the potential presence of historical soakaways as highlighted by EA assessments. If present, these soakaways may pose a risk of contamination entering the chalk and impacting the chalk aquifer. However, further work is required to investigate and confirm their presence before they can be fully considered as a plausible source and risk pathway.

The potential contaminants of concern include heavy metals, hydrocarbons, VOC including chlorinated solvents and PFAS.

The ground gas risk assessment for the Site identified that the Site would be classified as Characteristic Situation 1 (very low risk). The risk from organic vapours was considered to be low.

The methodology of this risk assessment uses the source-pathway-receptor pollutant linkage to provide a qualitative appraisal of environmental risks and potential liabilities associated with soil and groundwater contamination at the Site. The conceptual site model (CSM) has been prepared considering the proposed commercial end use.

Based on the intrusive investigation results, consultation with the EA, and the proposed development design, TRC prepared a Conceptual Site Model (CSM) which is presented in Table 3.1 below.

Table 3.1: Conceptual Site Model

Source	Pathway	Receptor	Risk
Asbestos fibres in Made Ground	Inhalation pathways	Future site users	Moderate Asbestos in soil was identified in two locations of 10 which were tested. It is unlikely that asbestos will present a significant risk to human health within the future development scenario, as buildings and hardstanding will provide a physical barrier against contact with contaminants. In areas of soft landscaping, the areas must be appropriately managed via an appropriate capping layer (300mm clean cover with a geotextile membrane at the base).
		Neighbouring site users	Low to moderate Neighbouring site users could be exposed to respirable fibres of asbestos, particularly during the construction phase. Any works which may disturb asbestos must be undertaken in accordance with the Control of Asbestos Regulations (CAR) 2012 and a Plan of Work will be required to manage risks from asbestos. Clean must also be constructed across areas of soft landscaping.
		Construction and maintenance workers	Moderate Risk pathway to be mitigated via Personal Protective Equipment (PPE), good hygiene practices and construction site management. Any works which may disturb asbestos must be undertaken in accordance with the Control of Asbestos Regulations (CAR) 2012 and a Plan of Work will be required to manage risks from asbestos.
Potential presence of historic industrial soakaways that may have given rise to discharges to ground. Contaminants of concern include heavy metals, VOC, hydrocarbons and PFAS.	Leaching of contaminants and vertical migration into groundwater	Groundwater (Principal Aquifer in bedrock deposits)	Moderate The Made Ground is underlain by the Holywell Nodular and New Pit Chalk Formation, which are designated as Principal Aquifers and are unconfined. These aquifers are within an SPZ 1. Groundwater in the bedrock is considered to be sensitive to contamination.

Source	Pathway	Receptor	Risk
			TRC detected low levels of potential leachable copper, mercury and PAH, with marginal exceedances of the Tier 1 criteria for the protection of groundwater recorded in one of three samples of Made ground which were analysed. Considering that leachate exceedances were recorded in only one sample of three tested, that only a thin layer of Made Ground was present across the Site, that groundwater is greater than 18-19m bgl, and that infiltration will be limited by the presence of buildings and hardstanding across the majority of the Site, the risk from soil leachates to the groundwater is considered to be low. Potential inputs via a suspected historical soakaway may pose a greater risk to controlled waters given the age and uncertainty around soakaway use. This elevates perceived risk to controlled waters and further assessment is required to confirm whether the soakaway is present within the Site boundary.
	Lateral migration of dissolved phase contaminants in the chalk aquifer	Principal aquifer in in the chalk including SPZ1 status. Potable water abstraction borehole south of the Site	Moderate/High If historic soakaways were present at the Site, there is potential that contamination may have entered the subsurface. If contaminants have entered the chalk aquifer there is an increased environmental risk to the underlying aquifer and off-site abstraction due to the high environmental sensitivity of the chalk.
	Lateral migration in groundwater/surface runoff	Surface water (Western Lake)	Low The Site is directly underlain by a Principal Aquifer from the Holywell Nodular and New Pit Chalk Formation; however, the nearest surface water feature is a small pond (Western Lake) located 38m northwest of the

Source	Pathway	Receptor	Risk
			Site, which sits above the level of the Site. Therefore, Western Lake is unlikely to be in hydraulic continuity with groundwater beneath the Site.

3.2 Summary of Remediation Drivers

Based on the results of the results of the generic risk assessments undertaken, remediation or mitigation will be required for the following:

- Protection of future site users from the inhalation of asbestos fibres from Made Ground; and
- Protection of construction workers and future maintenance workers from the inhalation of asbestos fibres Made Ground.

Any works which have the potential to disturb asbestos must be undertaken in accordance with CAR 2012 and a Plan of Work will be required.

The selection of appropriate water supply pipework should be confirmed by the local water supply company.

3.3 Data Gaps

Areas of uncertainty where insufficient information is available and further investigation and assessment is required are detailed below:

A historical soakaway may be present in the north of the Site which has not yet been investigated. Further ground investigation will be performed as part of the remediation works and will to assess the presence and risk of contamination from the location of the historical soakaway.

Relict below ground tanks and structures may be present on the Site which present a potential source of contamination. If these are identified during earthworks then they will be removed and any residual contamination assessed and where necessary remediated.

4.0 Remediation Options Appraisal

4.1 Objectives

The key objective of remediation is to reduce risks to human health and environmental receptors on and off-site to an acceptable level and to meet the requirements of contaminated land planning conditions.

Consideration should be given to detailed design at the planning stage of the project to adopt a development plan tailored to site conditions. By considering information on land contamination at the early stages, mitigation can be built into the final design. Changes to site layout, levels, proposed land use and access controls could be included, to limit exposure pathways, as an alternative to conventional remediation.

Where land use controls cannot entirely eliminate the risk, other available remediation options can be considered in isolation, or in conjunction with one another, to achieve the best practical solution.

The merits of the available options should be considered alongside a 'do-nothing' approach to ensure the benefit of the remediation is greater than its impact.

4.2 Outline Remediation Strategy

4.2.1 Development Led Remediation

Key development characteristics will complete the remediation via the removal of risk pathways. This will eliminate some of the key contaminant linkages ensuring protection of the future site users and underlying soil and groundwater conditions. The design considerations will include:

- Construction of hardstanding across the majority of the Site including building footprints, paved roadways and footpaths;
- Placement of engineered capping across areas of proposed landscaping including a clean cover of 300mm (150mm topsoil and 150mm subsoil) overlying a geotextile membrane;
- Use of appropriate materials for water supply pipework in accordance with statutory provider requirements; and,
- Management of risk from asbestos in soils.

4.2.2 Remediation

Where the design led solutions described above cannot provide adequate mitigation, this remediation strategy and verification plan sets out the procedure for dealing with contamination sources, removing pathways and/or breaking active contaminant linkages.

Based on the results of the previous assessment remediation will be required for the following:

- A redundant UST located on the northwest of the Site will be removed; and
- Any below ground structures including and historical soakaway features that may be present will be removed as part of the development works.

4.3 Discovery Strategy

TRC recognise that there may be unidentified contamination encountered during the groundworks phase of the development. This document set out proactive investigation tasks that will be undertaken to address data gaps requested by the EA.

Additionally, broader risks associated with this potentially variable ground conditions will be managed via a discovery strategy, as detailed in Section 7.2.

4.4 Changes to Design

TRC recognise that there may be changes to design and layout over the lifecycle of the project. Where these changes affect the remediation design this strategy should reviewed and, if necessary, amended to reflect the changes.

5.0 Investigation Scope

5.1 Objectives

Further ground investigation will be undertaken at the Site on commencement of development works. The investigation will seek to satisfy EA concerns regarding the potential for a historical soakaway feature in the northwest of the Site. The works will also seek to undertake further groundwater analysis to gather necessary data for risk assessment purposes which will be provided to the EA.

These works can only be undertaken on commencement of the development works due to the presence of a service corridor in the northwest Site entrance that has prevented access for investigation work previously. Once the site is established for the main phase of development, the contractor will be able to disconnect services and manage hazards posed by those services to facilitate TRC access to undertake ground investigation works.

TRC note that soakaway investigations will only be performed within the Site area. TRC cannot undertake works to investigate the potential historical soakaway that may be present outside of the property boundary, within highways or within third party controlled areas.

5.2 Investigation Scope of Work

The investigation scope of work will be as follows:

- Main contractors to disconnect buried utilities and divert site access to facilitate safe investigation of the northwest corner of the property;
- TRC to supervise excavation of a grid of machine excavated trial pits / trial trenches to investigate ground conditions in the northwest area in the vicinity of the location of the historical soakaway. The aim will be to either validate that there is no soakaway present or locate this historical feature and assess whether materials within and beneath the soakaway present a risk to site users or the environment;
- Trial pits will be excavated to a maximum depth of approximately 2.5m to enable visual inspection of ground conditions;
- All works to be supervised by a TRC engineer who will record geological sequences encountered and evidence of a historical soakaway or other such feature. Evidence may present as a soakaway void/chamber, pipework, infilled or deep Made Ground / concrete, gross contamination or other such anomalous ground condition;
- TRC will perform soil sampling and analysis which will be used to update the risk assessment for the Site; .
- TRC will perform further groundwater assessment through groundwater sampling from the Arcadis boreholes, if these can be located and are serviceable. If these are not serviceable, TRC will undertake works to install three new boreholes at the Site to replace these monitoring wells and to undertake one round of groundwater monitoring and sampling. If monitoring wells are to be replaced, the locations may be relocated to avoid conflict with future development works. The locations will ensure good general coverage of the Site, but will be located in a manner where they can be protected from ongoing construction activities;
- In addition to the Arcadis boreholes, TRC will also drill and construct a new groundwater monitoring borehole in the northwest area of the Site. The exact location will be subject to the findings of trial pitting investigation. As above, this borehole will be sited in a location where it can be protected from construction activities; and,
- Environmental laboratory analysis of soils and groundwater will include a full suite of EA contaminants of concern comprising heavy metals (including hexavalent chromium), VOC, TPH and PFAS screen.

5.3 Data Assessment and Next Steps

Following completion of the works, TRC will prepare an interim report on the findings. This assessment will include an appraisal of the ground and groundwater conditions observed by TRC and the environmental analysis. All analysis will be screened against the Generic Assessment Criteria (GAC) previously used in prior assessments for the Site.

If the investigation finds no new sources of contamination are present, then no further investigation or remediation works will be undertaken. The findings will be reported as part of the Verification Report to satisfy verification conditions within the planning consent. TRC will also provide interim updates to the EA via the pre-application consultation service.

If the investigation finds a new source of contamination, TRC will report this to the EA and will agree a strategy for remediation.

At this stage, it is considered that remediation would likely comprise source zone removal of contamination that may be encountered associated with the historical soakaway feature. These works will be clearly set out in a variation to this strategy and will include details of verification actions. For illustration, these works have been included in subsequent sections, but will be subject to finalisation depending on conditions encountered.

If contamination is detected in groundwater, TRC will undertake further risk assessments with due regard to the conditions encountered and knowledge of wider groundwater contamination. TRC will consult on findings and next steps with the EA under the pre-application service.

6.0 Remediation Activities

6.1 Remediation Overview

In summary the remediation will comprise the following:

- Management of risk from asbestos in soils;
- Decommissioning of monitoring wells;
- Installation of clean capping in areas of soft landscaping;
- Installation of upgraded water supply pipework if required;
- Removal of underground storage tank that may be present in the north west area associated with data centre operations; and,
- Removal of buried structures and foundations to facilitate development.

In the event that the ground investigation works detailed in Section 5 of this report identify sources of contamination then the following remediation actions are expected to be undertaken.

- Removal of historical soakaway and/or other sources if encountered;

6.2 Management of Risk from Asbestos in Soils

Any works which have the potential to disturb asbestos must be undertaken in accordance with CAR 2012 and a Plan of Work will be required.

Based on the results of the investigations undertaken the work is anticipated to constitute non-licensed work.

Non-licensed work does not require a licence but the workers must be trained and competent and appropriate control measures must be used to eliminate asbestos exposure or reduce it to as low as is reasonably practicable.

Asbestos fibres were encountered within shallow Made Ground at two locations (WS103 and WS104) during TRC's Intrusive Geoenvironmental and Geotechnical Site Assessment (2025). Concentrations were 0.002% and 0.003%. The asbestos identified in the samples analysed is considered to pose a low risk to future Site users and will be managed by the presence of hardstanding or landscaping.

Groundworkers should be made aware of the asbestos risk and assume all Made Ground encountered will potentially contain asbestos fibres. A Plan of Work for asbestos should be implemented and should significant asbestos fragments be encountered, works should cease, and a specialist environmental consultant should be contacted to undertake further assessment. In addition, this document would require to be updated to reflect the findings.

As stated in the guidance, the Plan of Work should include the following information:

- The nature and probable duration of the work – including a plan showing the location of the asbestos and nature of the asbestos;
- The number of people involved in the work;
- The address and location where the work is to be carried out;
- The methods to be used to prevent or reduce exposure to asbestos; e.g. prevention and control measures and arrangements for the handling and disposal of asbestos waste;
- The type of equipment, including PPE and Respiratory Protective Equipment (RPE), used for:
 - protecting and decontaminating those carrying out the work;
 - protecting other people present at or near the worksite.

The Plan of Work needs to be a practical and useful document that is suitable for groundworkers / employees to follow and needs to be produced by a suitably competent person.

6.3 Monitoring Well Decommissioning

All monitoring wells need to be decommissioned in order to prevent potential preferential pathways for ground gas or groundwater migration.

In preparing this document, TRC has consulted the publication of 'Good Practice for Decommissioning Redundant Boreholes and Wells'. The decommissioning methodology requires the pipework to be removed where possible, backfilling the entire borehole annulus from the base back to ground level with a low permeability bentonite / cement grout. This methodology usually requires some time for the grout to settle in the well which may require more grout after decommissioning.

The headworks should be removed. The final 2m to ground surface or to the depth of cut or to any structures will be filled with a concrete cap that extends 0.5m at the top of the borehole.

6.4 Clean Cover Layer

Where soft landscaping is proposed in areas where contaminated soils will be within 300mm of the final site surface, the construction contractor will construct a clean cover layer comprising a **minimum thickness of 300mm** clean imported subsoil and/or topsoil. The minimum thickness will be achieved after compaction and settlement.

If the clean cover layer is placed directly on to contaminated soils then a geotextile marker layer will be installed beneath the clean imported material layer to act as a visual warning, prevent mixing with the underlying Made Ground and to discourage deeper excavation. The membrane should meet the basic requirements for separation and filtration membranes and should be water permeable, rot proof, chemically resistant and have a high tensile strength appropriate to the situation and function. Woven or non-woven geotextiles can be used. The membrane will cover the whole area of soils where coincident with proposed soft landscaping. If the clean cover layer is placed over 100mm of more of clean materials e.g. granular infill, then a geotextile marker layer is not required.

The actual thickness of clean cover should be discussed with the landscape professional and should be compatible with the landscape and planting requirements.

Cover soils may be either imported or re-used from the Site.

Clean cover is not required beneath buildings or permanent hard paving such as site roads, parking and footpaths.

Clean cover thickness may need to be reduced in root protection zones to avoid damage to trees, or locally increased where greater planting depths are required.

There may be additional requirements where a Materials Management Plan (MMP) is in place.

6.5 Upgraded Water Supply Pipework

Water supply pipework will be installed in accordance with the design agreed with the local water supply company.

6.6 Underground Storage Tank Removal

Arcadis recorded that two UST's were present in the northwest of the Site associated with backup generators for the datacentre. Whilst both have been decommissioned, only one is recorded as being removed. It is understood that the second could not be removed due to buried utilities and site constraints.

The development works will include enabling activities to remove such obstructions to facilitate construction and ensure that potential contaminant sources are removed. It is understood that this tank has been decommissioned and no contamination was found during the previous UST removal. Given these tanks are of a similar age, it is considered likely that the risk of contamination associated with this tank is low.

The main contractor or their enabling works contractor will ensure the area is safe for access and utilities are disconnected. They will then undertake the following works:

- Excavate and expose tank;
- Inspect inside of the tank to confirm that all fuel products are removed and the tank is gas free;
- If fuels or other substances are present, the tank will be emptied by vacuum tanker and jet washed clean to confirm gas free;
- The tank and any associated cradle will be excavated and removed from the Site as waste; and,
- The excavation will be backfilled with clean imported material or demolition derived aggregates.

6.7 Removal of Redundant Structures

Buried redundant structures are known to be present beneath the Site. These structures comprise former building foundations of the datacentre and relict structures that pre-date the current building. TRC also suspect foundation structures associated with the travelling crane mapped in the east of the Site.

These structures require removal in advance of development. The structures will be excavated during enabling works and brick and concrete will be subject to crushing for subsequent re-use as a recycled aggregate. Redundant concrete and deep concrete will be excavated to a maximum of 1.5m below ground level to remove potential geo-hazards and hard spots. These obstructions will be recorded on as built plans.

During these works, the enabling works contractor will implement the discovery strategy as per Section 7.1. TRC will be included in routine project meetings and will provide an on call service to support the development team in assessing areas of potential contamination that may be encountered during these works.

If suspected contamination is encountered, TRC will undertake investigation. If required, TRC will design a remediation action plan and present an updated version of this strategy.

6.8 Potential Additional Remediation Works

If a historical soakaway feature or evidence of unacceptable contamination is encountered during any of the site works, remediation is expected to comprise source zone removal under an environmental watching brief provided by TRC. If required, these works would likely comprise the following tasks, but would be subject to a revised remediation strategy based on the conditions encountered.

- Main contractor to undertake excavation works to remove the source zone soils. All wastes would be subject to off-site disposal in accordance with standard duty of care requirements;

- Any pipework or drainage would be either removed on-site as far as the Site boundary. If required, drainage would be sealed with grout or clay to mitigate future pathway risks; and,
- The excavation will be backfilled with clean imported material or demolition derived aggregates.

These remediation works would be reported to the EA under the pre-application advice service as an interim report to ensure that the matter has been satisfactorily closed out. The details will also be reported within the Verification report for completeness at the end of the project prior to occupation.

6.9 Long Term Monitoring

TRC does not propose to undertake further groundwater monitoring beyond the initial round of sampling as presented in Section 5.2.

Based on the evidence to date, TRC does not consider that there is a significant source of contamination at the Site that poses a potential risk to human health or controlled waters, therefore there is no driver for long term monitoring needs. This position may be amended depending on the findings of further investigation works and any associated risk assessment.

TRC does not propose to undertake groundwater monitoring during the enabling, earthworks or foundation construction activities. The current development proposals comprise ground improvement comprising Rolled Dynamic Compaction (RDC). This is a surface focused ground treatment that seeks to consolidate soils to achieve a desired engineering specification for the construction of shallow pad foundations. Given the depth to groundwater and the fact that no foundations will be formed in the saturated zone chalk, TRC consider that this foundation design will present a low risk to controlled waters and no further risk assessment or design amended is required.

7.0 Remediation Implementation

The following section outlines the requirements for dealing with soil contamination generally when undertaking remediation and associated works on site.

7.1 Geo-environmental Oversight

All remediation works will be overseen by a TRC geo-environmental specialist to record the works for future reporting purposes and to verify that they have met the remediation aims.

This will include any works undertaken to remove known potential sources of contamination such as the UST. It will also include works to address potential sources of contamination such as the historic soakaway or other unknown contamination that may be encountered during enabling works.

7.2 Discovery Strategy

Due to the historical industrial use on the Site, and the heterogeneous nature of Made Ground soils beneath the Site, consideration should be given towards the potential for the development works to encounter previously unidentified contamination. A discovery strategy will be employed to ensure that groundworkers identify and manage suspected areas of ground contamination should they be encountered.

In order to manage previously unidentified contamination, TRC recommends the following procedure if suspected contamination is identified:

1. Stop Works – cease current works to allow assessment and report to environmental manager;
2. Isolate – isolate the area of work to contain the contamination and minimise exposure to unauthorised persons and surrounding users;
3. Protect – take necessary actions to mitigate risks to surrounding environmental receptors through run-off, leaching or contamination of surrounding materials. Actions may include covering of materials, use of spill kits or containment and temporary sealing of drainage;
4. Assess – investigate contaminated materials and identify an appropriate course of action which may comprise a revised risk assessment;
5. Record – record findings and any changes in working method statements as necessary to mitigate risks in the Site files; and,
6. Report – notify the appropriate regulators;

Findings of any contamination discovery would be documented and reported to regulatory stakeholders including the LPA and the EA where relevant. Any further assessment and remediation would be performed in consultation with those stakeholders to ensure compliance with regulatory, planning and permitting requirements as relevant.

7.3 Permits and Consents

Various environmental permits and consents may be required as part of any remediation / demolition / enabling works. These would include, but are not limited to, a Materials Management Plan (MMP) to manage movement of materials around the Site and off-Site, abstraction licence if groundwater is to be abstracted and discharge consents for disposal of perched water in excavations. The contractor should apply for and manage these consents and permits as relevant to ensure compliance.

7.4 Additional Environmental Controls

The contractor should implement management procedures to ensure the highest level of environmental management at the Site. Key considerations for the site are:

- Management of potentially contaminated materials;
- Management of surface runoff;
- Controls of dust and debris;
- Noise;
- Odours;
- Vibration
- Control of debris on highways;
- Vehicle movements;
- Access / egress; and,
- Working hours.

7.5 Stockpile Management

It is anticipated that as part of the enabling works stockpiles will be generated. As mentioned previously, materials generated from the Site require suitability testing to verify their appropriateness for re-use within the development or classification for disposal.

A management plan should be adopted detailing the location and content of each stockpile (including source) and volumes of stockpiles. Should suspected contamination be present in the stockpile, these need to be bunded and covered to prevent contamination run-off.

Stockpiles should be managed in a manner that does not cause a nuisance to surrounding land users or create a risk to subsidence or surround properties.

7.6 Materials Import

All soil materials imported to Site will require sampling and testing to confirm their suitability for use within the development.

Documentary evidence should be provided to confirm the source, materials quality (including chemical testing) and suitability for use within the development. If the material being imported would otherwise be considered a waste, a suitable Environmental Permit, Exemption or MMP in accordance with the CL:AIRE Definition of Waste Code of Practice will be required.

The minimum following soil testing for environmental suitability should be undertaken: heavy metals, PAH, TPH and asbestos screening. If additional potential contaminants of concern are identified at the source site, then additional testing will need to be carried out to determine whether those contaminants are present and to confirm if soils are suitable for import. Sampling frequency of this material should be approximately 1 sample per 250 m³ (minimum of three samples per source). Additional testing of soil leachate may be required where there is a potential risk to Controlled Waters receptors.

Soil must be assessed and confirmed as being suitable use by screening the data against the GAC as set out in section 8.4 of this report.

In addition, manufactured certified topsoil and subsoil products may require testing in accordance with BS3882:2015 and BS8601:2014 respectively to determine their suitability for use.

7.7 Materials Re-Use

If site won material is to be excavated and re-used on the Site, this should be carried out under a suitable Environmental Permit, Exemption or in accordance with the CL:AIRE Definition of Waste Code of Practice.

Material destined for re-use will need to be tested both environmentally and geotechnically to confirm its suitability for the development and proposed re-use. The following testing for environmental suitability

should be undertaken: heavy metals, PAH, TPH and asbestos screening. Testing frequency should be one sample for every 250 m³ (with a minimum of three per source).

Soil must be assessed and confirmed as being suitable for use by screening the data against the GAC as set out in section 8.4.

7.8 Materials Disposal

All material movements off-site should be documented, and an appropriate records maintained by the Principal Contractor managing the phase of work. The documentary evidence shall include a minimum of materials testing, waste transfer and disposal documentation to demonstrate appropriate duty of care and compliance with relevant waste regulation. This information should be provided for inclusion in the final verification report.

It should be noted that all waste soil requiring disposal off-site should be classified in accordance with WM3 Guidance on the classification and assessment of waste (1st Edition v1.2.GB). It is the responsibility of the waste producer to ensure that all waste is correctly classified and there are penalties for incorrect classification.

8.0 Verification Plan

8.1 Purpose

A verification plan is required to document and record the remediation work completed at the Site. The verification plan details what testing is required and what records must be kept and maintained throughout the project lifecycle, it may also serve to meet data requirements of future planning condition discharges and warranty providers.

The following verification actions are proposed for the Site. It should be noted that the Site will undergo routine enabling works which is not covered within this environmental specific remediation strategy.

8.2 Asbestos Contaminated Soils

The contractor will keep records of any asbestos identified for inclusion in the verification report. If air monitoring is undertaken as part of the control measures then the details and results of the monitoring should also be included in the verification report.

8.3 Monitoring Well Decommissioning

Detailed records of the monitoring well decommissioning works will be included in the verification report and will include:

1. The reason for decommissioning;
2. Groundwater level prior to decommissioning;
3. Any removal of pipework or attempt to remove the pipework;
4. The depth, position and nature of backfill materials;
5. Photographs of each borehole following completion of the decommissioning, and,
6. Any problems encountered during decommissioning.

8.4 Clean Cover and Materials Import

In areas of soft landscaping where clean cover is required, hand pits shall be excavated to verify the thicknesses of the clean cover and the presence of the geotextile marker layer.

Photographs of each pit will be taken with a scale in the photograph to show the thicknesses of the clean cover and representative soil samples will be taken of each material making up the clean cover system. A minimum of one pit will be advanced in each area of soft landscaping.

The technical specification of the geotextile marker layer must be included in the Verification Report.

Clean cover and imported materials should be verified as being suitable for use by sampling and laboratory testing for the following: heavy metals, PAH, TPH and asbestos screening. In addition, imported materials should be tested for any potential contaminants of concern identified based on the source of the materials. Testing frequency should be one sample for every 250 m³ (with a minimum of three per source).

Results should be screened against appropriate verification criteria based on the human health GAC for a commercial use to confirm suitability. Where leachates are being tested then the appropriate leachate criteria should be used for assessment (Drinking Water Standards (DWS)). In addition, asbestos should not be present. Imported materials should not further degrade existing conditions in relation to Human Health or the environment. Materials should be visually clean and free from any anthropogenic components.

The verification criteria are presented in Annex B.

Soils which do not meet the verification criteria should not be used in the development and must be removed from Site.

In addition, manufactured certified topsoil and subsoil products may require testing in accordance with BS3882:2015 and BS8601:2014 respectively to determine their suitability for use.

8.5 Verification of Remediation Excavations

Verification is required on remediation excavations as created during the removal of UST and removal of potential source zones identified during the site investigation and enabling works. Verification will aim to demonstrate that the source has been removed and the surrounding soils are suitable to remain in-situ as they pose no significant risk to human health or controlled waters.

Verification sampling will comprise the collection of soil samples from the faces and base of each excavation on an approximate 10m grid with a minimum of one sample from each face and one from the base. Photographic records of excavations will also be made.

Sample analysis will be dependent on the location and expected contaminant types associated with the remediation. In the UST excavation, soils will be scheduled for TPH analysis as the UST reportedly contained diesel for backup generators associated with the data centre. Elsewhere contamination may be associated with historical industrial land uses and would therefore may be scheduled for the EA suite of contaminants of concern to comprise, heavy metals, TPH, VOC and PFAS.

Environmental analysis will be screened against GAC as set out in Section 8.4.

If any of the verification samples fail the GAC then further assessment will be carried out, or additional materials will be excavated from the location of the failure until such a point where further sampling and analysis demonstrates that the verification criteria have been achieved.

8.6 Buried Services

The contractor will keep a record of buried service installations for inclusion in the verification report. Suitable documents can include as built drawings, photographic records and inspections by the environmental consultant.

The contractor will keep a record of water supply pipe construction for inclusion in the verification report. Suitable documents should include the agreement with the water authority on the materials which have to be used, materials data sheet for the water supply pipe, as built drawings, photographic records and inspections by the environmental consultant during pipe laying.

8.7 Action Triggered by the Discovery Strategy and Gap Filling

Any actions triggered by the discovery strategy and/or from the gap filling exercise should be reported in full. As required by the planning permission, this will include investigation, risk assessment and remediation as required to mitigate risks. These actions will be reported under separate cover and once complete would be summarised within the verification report

9.0 Verification Report

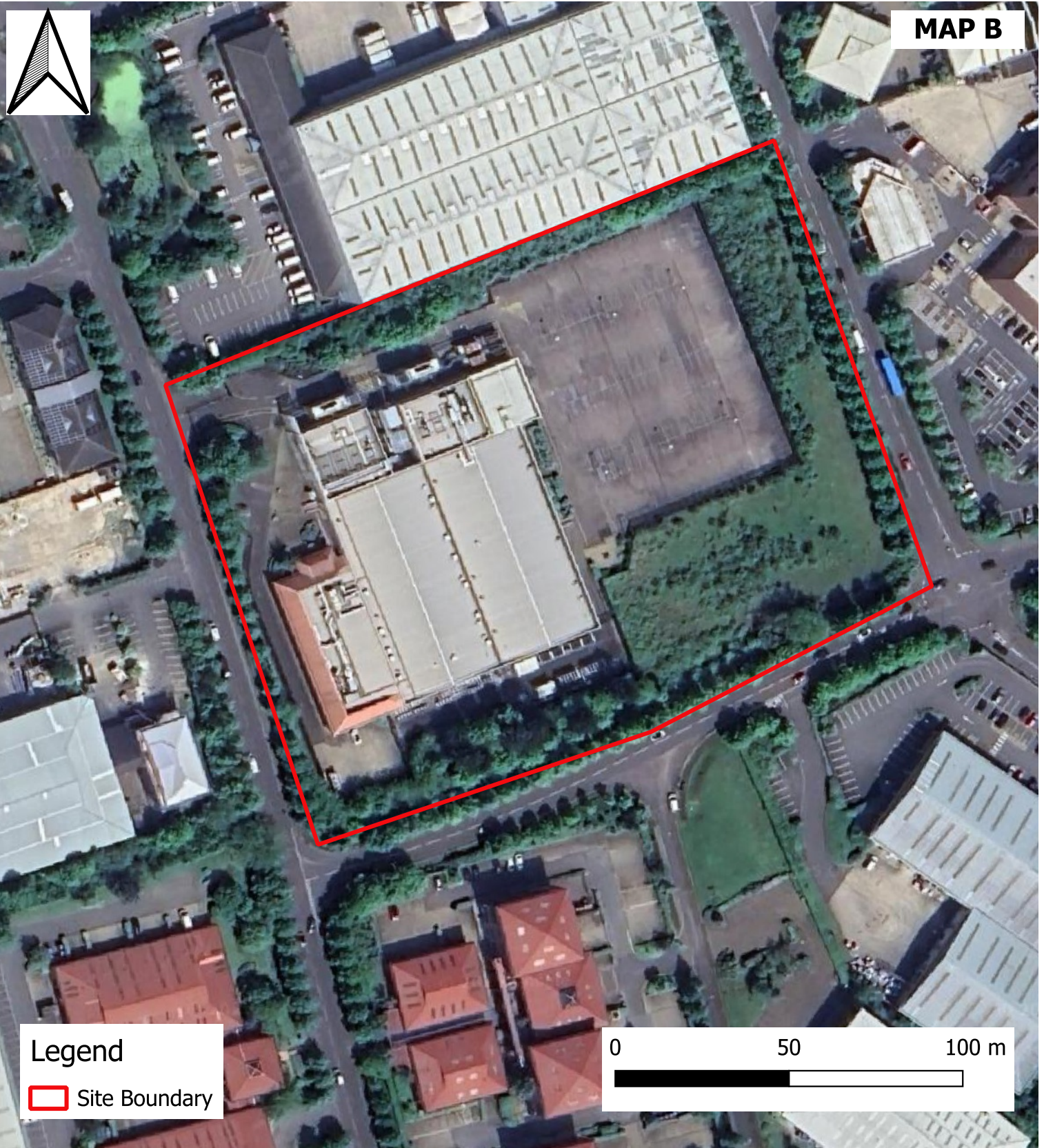
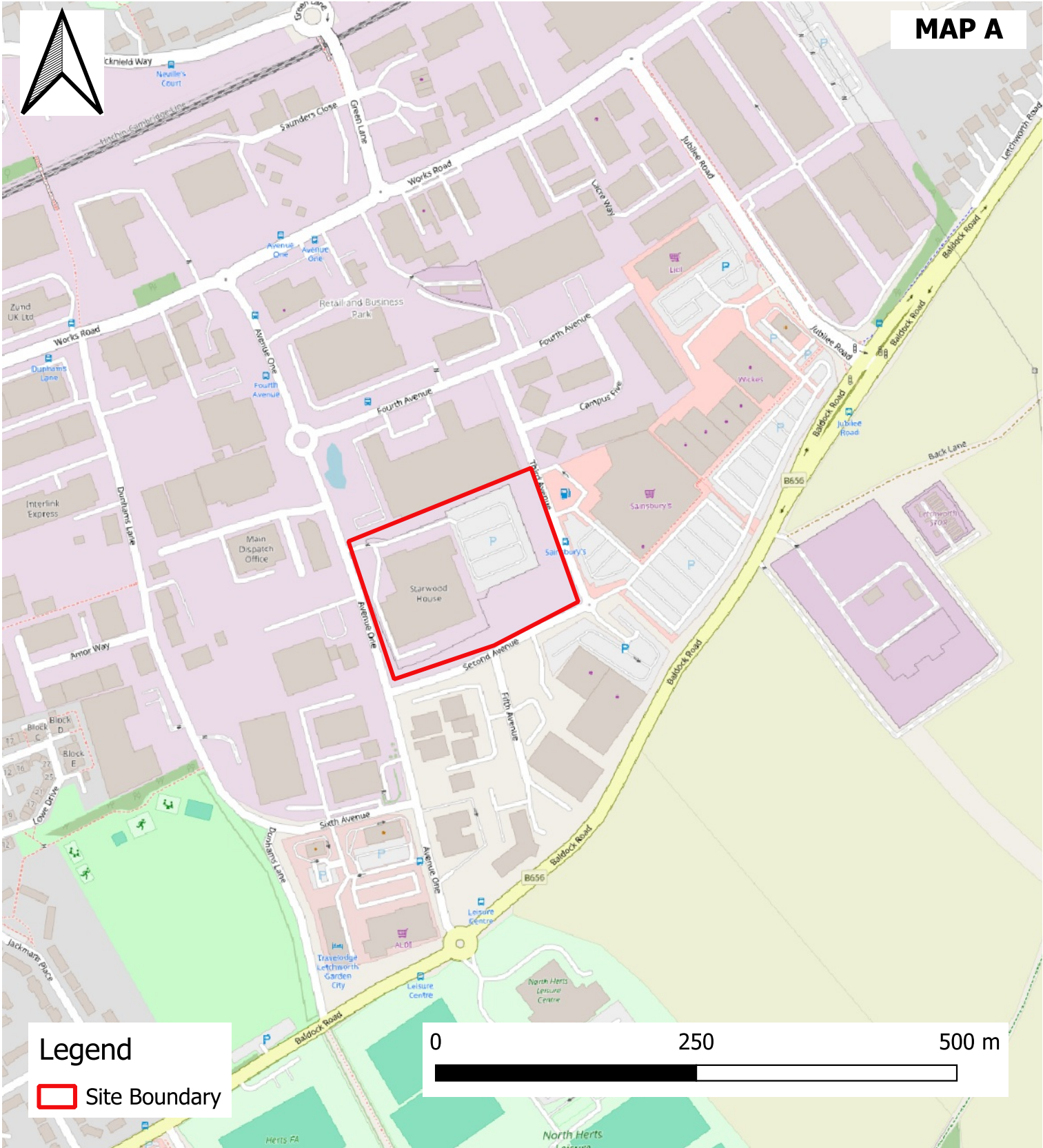
A verification report should be prepared to confirm that all necessary remediation actions have been satisfactorily completed at the Site. It also includes a description of the work undertaken and details of any unexpected conditions found during remediation and how they were dealt with. The report will contain the following key information:

- Summary of works carried out;
- Verification of cover layer thickness, soil quality and geotextile marker layer;
- Material data sheet for the geotextile marker layer;
- Records of upgrade water supply pipework (if required);
- As built drawings;
- Field records including records of borehole decommissioning;
- Photographic and other media records;
- Findings of any actions triggered in association with the discovery strategy;
- Documentation of variations to the remediation strategy;
- Verification test results and delivery notes for imported soil;
- Records of any excavation verification works;
- Waste disposal records from Site as may be relevant during the construction works; and,
- Other records.

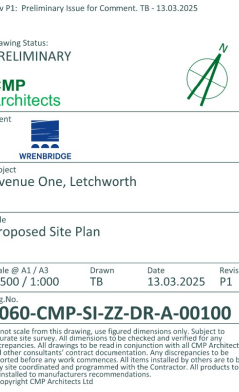
The Verification Report will confirm if the remediation objectives and verification criteria were met.

Should the standard of remediation not meet the original objectives this will be documented by way of a variation. The variation will outline what attempts were made to complete the remediation, describe any residual risks which may exist and set out any monitoring or further provision which may be required to reduce the risks to an acceptable level.

Annex A: Figures



NOTES	COPYRIGHT NOTES				REVISIONS	TRC Work.Life 20 Red Lion Street London WC1R 4PS	TITLE		
	Google Imagery January 2025						SITE LOCATION PLAN		
	© OpenStreetMap contributors - Data is available under the Open Database License. Cartography licensed as CC BY-SA.					TRC PROJECT NO. 631621.0000.0000	SCALE MAP A: 1:5,000 @ A3 MAP B: 1:1,500 @ A3		
	P01	FIRST ISSUE				CLIENT LETCHWORTH INVESTMENT LLP	PURPOSE OF ISSUE		STATUS
		Initials	KS	19/3/2025			SUITABLE FOR INFORMATION		
REV.	REVISION NOTES/COMMENTS				PROJECT STARWOOD HOUSE, LETCHWORTH	DRAWING NO		REVISION	
	Initials					FIGURE 01			



NOTES	COPYRIGHT NOTES	REVISIONS				 Work.Life 20 Red Lion Street London WC1R 4PS	TITLE			
							PROPOSED DEVELOPMENT PLAN			
						TRC PROJECT NO. 631621.0000.0000	SCALE N/A			
		P01	FIRST ISSUE				CLIENT LETCWORTH INVESTMENT LLP	PURPOSE OF ISSUE		STATUS
			Initials	KS	19/3/2025			SUITABLE FOR INFORMATION		
REV.	REVISION NOTES/COMMENTS				PROJECT STARWOOD HOUSE, LETCWORTH	DRAWING NO		REVISION		
	Initials					FIGURE 02				

Annex B: Verification Criteria

Human Health Generic Assessment Criteria

Contaminant of Concern	Units	Generic Assessment Criteria (mg/kg)				Source
		Residential (wHP)	Residential (woHP)	POS (Residential)	Commercial	
Heavy Metals						
Arsenic	mg/kg	37	40	79	640	S4UL
Boron	mg/kg	290	11000	21000	240000	S4UL
Cadmium	mg/kg	11	85	120	190	S4UL
Chromium (hexavalent)	mg/kg	6	6	7.7	33	S4UL
Chromium (III)	mg/kg	910	910	1500	8600	S4UL
Chromium	mg/kg	910	910	1500	8600	S4UL
Copper	mg/kg	2400	7100	12000	68000	S4UL
Lead	mg/kg	200	310	630	2330	C4SL
Mercury	mg/kg	40	56	120	1100	S4UL
Nickel	mg/kg	180	180	230	980	S4UL
Selenium	mg/kg	250	430	1100	12000	S4UL
Zinc	mg/kg	3700	40000	81000	730000	S4UL
Polycyclic Aromatic Hydrocarbons (PAHs)						
Naphthalene	mg/kg	2.3	2.3	4900	190	S4UL
Acenaphthylene	mg/kg	170	2900	15000	83000	S4UL
Acenaphthene	mg/kg	210	3000	15000	84000	S4UL
Fluorene	mg/kg	170	2800	9900	63000	S4UL
Phenanthrene	mg/kg	95	1300	3100	22000	S4UL
Anthracene	mg/kg	2400	31000	74000	520000	S4UL
Fluoranthene	mg/kg	280	1500	3100	23000	S4UL
Pyrene	mg/kg	620	3700	7400	54000	S4UL
Benzo(a)anthracene	mg/kg	7.2	11	29	170	S4UL
Chrysene	mg/kg	15	30	57	350	S4UL
Benzo(b)fluoranthene	mg/kg	2.6	3.9	7.1	44	S4UL
Benzo(k)fluoranthene	mg/kg	77	110	190	1200	S4UL
Benzo(a)pyrene	mg/kg	2.2	3.2	5.7	35	S4UL
Indeno(1,2,3-cd) pyrene	mg/kg	27	45	82	500	S4UL
Dibenz(a,h)anthracene	mg/kg	0.24	0.31	0.57	3.5	S4UL
Benzo(ghi)perylene	mg/kg	320	360	640	3900	S4UL
Monoaromatics						
Benzene	µg/kg	87	380	72000	27000	S4UL
Toluene	µg/kg	130000	880000	56000000	56000000	S4UL
Ethylbenzene	µg/kg	47000	83000	24000000	5700000	S4UL
p & m-xylene	µg/kg	56000	79000	41000000	5900000	S4UL
o-xylene	µg/kg	60000	88000	41000000	6600000	S4UL
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	49000	73000	-	7900000	EIC/AGS/CL:AIRE
Petroleum Hydrocarbons (Aliphatic)						
TPH-CWG – Aliphatic >EC5 – EC6	mg/kg	42	42	570000	3200	S4UL
TPH-CWG – Aliphatic >EC6 – EC 8	mg/kg	100	100	600000	7800	S4UL
TPH-CWG – Aliphatic >EC8 – EC10	mg/kg	27	27	13000	2000	S4UL
TPH-CWG – Aliphatic >EC10 – EC12	mg/kg	130	130	13000	9700	S4UL
TPH-CWG – Aliphatic >EC12 – EC16	mg/kg	1100	1100	13000	59000	S4UL
TPH-CWG – Aliphatic >EC16 – EC21	mg/kg	65000	65000	250000	1600000	S4UL

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TPH-CWG – Aliphatic >EC21 – EC35	mg/kg	65000	65000	250000	1600000	S4UL
Petroleum Hydrocarbons (Aromatic)						
TPH-CWG – Aromatic >EC5 – EC7	mg/kg	70	370	56000	26000	S4UL
TPH-CWG – Aromatic >EC7 – EC8	mg/kg	130	860	56000	56000	S4UL
TPH-CWG – Aromatic >EC8 – EC10	mg/kg	34	47	5000	3500	S4UL
TPH-CWG – Aromatic >EC10 – EC12	mg/kg	74	250	5000	16000	S4UL
TPH-CWG – Aromatic >EC12 – EC16	mg/kg	140	1800	5100	36000	S4UL
TPH-CWG – Aromatic >EC16 – EC21	mg/kg	260	1900	3800	28000	S4UL
TPH-CWG – Aromatic >EC21 – EC35	mg/kg	1100	1900	3800	28000	S4UL
Volatile Organic Compounds (VOCs)						
Chloromethane	µg/kg	8.3	8.5	-	1000	EIC/AGS/CL:AIRE
Chloroethane	µg/kg	8300	8400	-	960000	EIC/AGS/CL:AIRE
Bromomethane	µg/kg	-	-	-	-	-
Vinyl Chloride	µg/kg	0.64	0.77	3500	59	S4UL
Trichlorofluoromethane	µg/kg	-	-	-	-	-
1,1-Dichloroethene	µg/kg	230	230	-	26000	EIC/AGS/CL:AIRE
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	110	120	-	14000	EIC/AGS/CL:AIRE
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	49000	73000	-	7900000	EIC/AGS/CL:AIRE
1,1-Dichloroethane	µg/kg	2400	2500	-	280000	EIC/AGS/CL:AIRE
2,2-Dichloropropane	µg/kg	-	-	-	-	-
Trichloromethane	µg/kg	910	1200	2500000	99000	S4UL
1,1,1-Trichloroethane	µg/kg	8800	9000	140000000	660000	S4UL
1,2-Dichloroethane	µg/kg	7.1	9.2	29000	670	S4UL
1,1-Dichloropropene	µg/kg	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	190	190	-	22000	EIC/AGS/CL:AIRE
Benzene	µg/kg	87	380	72000	27000	S4UL
Tetrachloromethane	µg/kg	26	26	890000	2900	S4UL
1,2-Dichloropropane	µg/kg	24	24	-	3300	EIC/AGS/CL:AIRE
Trichloroethene	µg/kg	16	17	120000	1200	S4UL
Dibromomethane	µg/kg	-	-	-	-	-
Bromodichloromethane	µg/kg	16	19	-	2100	EIC/AGS/CL:AIRE
Cis-1,3-dichloropropene	µg/kg	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	-	-	-	-	-
Toluene	µg/kg	130000	880000	56000000	56000000	S4UL
1,1,2-Trichloroethane	µg/kg	600	880	-	94000	EIC/AGS/CL:AIRE
1,3-Dichloropropane	µg/kg	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-
Tetrachloroethene	µg/kg	180	180	1400000	19000	S4UL
1,2-Dibromoethane	µg/kg	-	-	-	-	-
Chlorobenzene	µg/kg	460	460	11000000	56000	S4UL
1,1,1,2-Tetrachloroethane	µg/kg	1200	1500	1400000	110000	S4UL
Ethylbenzene	µg/kg	47000	83000	24000000	5700000	S4UL
p & m-Xylene	µg/kg	56000	79000	41000000	5900000	S4UL
Styrene	µg/kg	8100	35000	-	3300000	EIC/AGS/CL:AIRE
Tribromomethane	µg/kg	-	-	-	-	-
o-Xylene	µg/kg	60000	88000	41000000	6600000	S4UL

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1,1,2,2-Tetrachloroethane	µg/kg	1600	3900	1400000	270000	S4UL
Isopropylbenzene	µg/kg	11000	12000	-	1400000	EIC/AGS/CL:AIRE
Bromobenzene	µg/kg	870	910	-	97000	EIC/AGS/CL:AIRE
n-Propylbenzene	µg/kg	34000	40000	-	4100000	EIC/AGS/CL:AIRE
2-Chlorotoluene	µg/kg	-	-	-	-	-
4-Chlorotoluene	µg/kg	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	-	-	-	-	-
tert-Butylbenzene	µg/kg	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	350	410	-	42000	EIC/AGS/CL:AIRE
sec-Butylbenzene	µg/kg	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	400	440	300000	30000	S4UL
p-Isopropyltoluene	µg/kg	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	23000	24000	90000000	2000000	S4UL
1,4-Dichlorobenzene	µg/kg	61000	61000	17000000	4400000	S4UL
Butylbenzene	µg/kg	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	2600	2600	15000000	220000	S4UL
Hexachlorobutadiene	µg/kg	290	320	25000	31000	S4UL
1,2,3-Trichlorobenzene	µg/kg	1500	1500	1800000	102000	S4UL
Semi Volatile Organic Compounds (SVOCs)						
Aniline	mg/kg	-	-	-	-	-
Phenol	mg/kg	120	440	440	440	S4UL
2-Chlorophenol	mg/kg	0.87	94	620	3500	S4UL
Bis(2-chloroethyl)ether	mg/kg	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.4	0.44	300	30	S4UL
1,2-Dichlorobenzene	mg/kg	23	24	90000	2000	S4UL
1,4-Dichlorobenzene	mg/kg	61	61	17000	4400	S4UL
Bis(2-chloroisopropyl)ether	mg/kg	-	-	-	-	-
2-Methylphenol	mg/kg	80	3700	-	160000	EIC/AGS/CL:AIRE
Hexachloroethane	mg/kg	0.2	0.22	-	22	EIC/AGS/CL:AIRE
Nitrobenzene	mg/kg	-	-	-	-	-
4-Methylphenol	mg/kg	80	3700	-	160000	EIC/AGS/CL:AIRE
Isophorone	mg/kg	-	-	-	-	-
2-Nitrophenol	mg/kg	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	19	210	-	16000	EIC/AGS/CL:AIRE
Bis(2-chloroethoxy)methane	mg/kg	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	2.6	2.6	15000	220	S4UL
2,4-Dichlorophenol	mg/kg	-	-	-	-	-
4-Chloroaniline	mg/kg	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.29	0.32	25	31	S4UL
4-Chloro-3-methylphenol	mg/kg	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	-	-	-	-	-
2-Methylnaphthalene	mg/kg	-	-	-	-	-
2-Chloronaphthalene	mg/kg	3.7	3.8	-	390	EIC/AGS/CL:AIRE
Dimethylphthalate	mg/kg	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.78	78	-	1900	EIC/AGS/CL:AIRE

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2,4-Dinitrotoluene	mg/kg	1.5	170	-	3700	EIC/AGS/CL:AIRE
Dibenzofuran	mg/kg	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	-	-	-	-	-
Diethyl phthalate	mg/kg	120	1800	-	150000	EIC/AGS/CL:AIRE
4-Nitroaniline	mg/kg	-	-	-	-	-
Azobenzene	mg/kg	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	-	-	-	-	-
Hexachlorobenzene	mg/kg	1.8	4.1	16	110	S4UL
Carbazole	mg/kg	-	-	-	-	-
Dibutyl phthalate	mg/kg	13	450	-	15000	EIC/AGS/CL:AIRE
Anthraquinone	mg/kg	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	1400	42000	-	940000	EIC/AGS/CL:AIRE
Polychlorinated biphenyls (PCBs)						
PCB (sum)	mg/kg	8	8	-	240	SGV

Key	
Source Reference	Document
S4UL	Nathanail, CP et al (2015) The LQM/CIEH S4ULs for human health risk assessment.
C4SL	Department for Environment, Food and Rural Affairs (2014) SP1010: Development of category 4 screening levels for assessment of land affected by contamination – policy companion document.
EIC/AGS/CL:AIRE	Environmental Industries Commission, The Association of Geotechnical and Geoenvironmental Specialists and Contaminated Land: Applications in Real Environments (2009) The EIC/AGS/CL:AIRE soil generic assessment criteria for human health risk assessment.
SGV	Environment Agency (2009) Soil guideline values for dioxins, furans and dioxin-like PCBs in soil. Science report SC050021/Dioxins SGV.

Notes:

The above GAC are for guidance only when assessing risk to human health receptors for specific development scenarios.

The absence of GAC for a substance does not necessarily imply there is no risk.

Some substances may be known by alternative names.

GAC given for organic compounds are based on the assumption of 1% soil organic matter with the exception of PCBs which assumes 6% soil organic matter.

Abbreviations:

GAC	Generic Assessment Criteria
wHP	With homegrown produce
woHP	Without homegrown produce
POS	Public open space