

24 July, 2017

Mr. Matt Barron  
Walsh Ltd  
32 Lafone Street, London  
SE1 2LX

Our ref: CG/18992

Please reply to: Sarah Key / Richard Ball

Dear Matt

**101 Camley Street, London – Remediation Method Statement**

Further to geotechnical assessment undertaken at the site, CGL has been instructed by Walsh Ltd (the client) to provide a Remediation Method Statement (RMS) based on the existing ground investigation information relating to a redevelopment at 101 Camley Street, London. It is understood that the redevelopment will comprise the demolition of the existing warehouse building on site, and construction of a new 11 storey mix-use development with a lower level ground floor and single storey basement beneath the whole footprint of the site. It is understood that there are to be two small areas of public open space in the north-western and south-eastern corners of the site.

The aim of this letter report is to summarise the findings of our independent review of the information provided by the client, namely the RSK Geotechnical and Geoenvironmental Site Assessment Report (GGSAR)<sup>1</sup> prepared for site, and to present the appropriate RMS for compliance with Planning Condition 21. The RSK report should be read in conjunction with this letter.

The planning conditions states:

*At least 28 days before development commences:*

*(a) a written programme of ground investigation for the presence of soil and groundwater contamination and landfill gas shall be submitted to and approved by the local planning authority in writing; and  
(b) following the approval detailed in paragraph (a), an investigation shall be carried out in accordance with the approved programme and the results and a written scheme of remediation measures [if necessary] shall be submitted to and approved by the local planning authority in writing.*

*The remediation measures shall be implemented strictly in accordance with the approved scheme and a written report detailing the remediation shall be submitted to and approved by the local planning authority in writing prior to occupation.*

**RSK Site Investigation and conceptual site model summary**

The desk study undertaken by RSK indicated that the site was expected to be underlain by the London Clay Formation. The London Clay is noted to be unproductive strata and an aquiclude and the site was not located in a groundwater source protection zone. No current licensed groundwater abstractions for potable water were indicated within a 1km radius of the site and the nearest identified water abstraction was located approximately 370m north of the site and related to a borehole at The Kings Cross Concrete Plant. There was one currently licensed surface water abstraction within a 500m radius of the site, relating to Camley Street Nature Park, located approximately 130m southeast. The nearest identified surface watercourse was

<sup>1</sup> RSK Ltd (2014), *Geotechnical and Geoenvironmental Site Assessment Report: 101 Camley Street*, Final, Report No.: 371254-01 (00).

the Grand Union (Regents) Canal which lies adjacent to the site northern boundary. The RSK report also indicated that there were no contamination incidents originating from the subject site or any recorded pollution incidents to controlled waters in the vicinity. The site was not located in an area at risk from flooding.

On the earliest available map from the 1870s, the site was noted to be largely vacant, with only an office building in the centre of the site. By the 1980s stables were noted to be present on the site. By the 1950s the office building was noted as a *Ruin* and two new small buildings were indicated on site and the stables were still present. The stables and ruins had been removed from the site by 1960s, although the two smaller buildings were still present. By the 1980s the site had been developed into its current warehouse layout.

The surrounding area was noted to have been occupied at various times by a railway, with *associated goods sheds and engine sheds, a workhouse, goods depots, ale stores, warehouses, a sorting office and a hospital*. The information reviewed by RSK indicated three records of potentially contaminative industrial land use within 100m of the site. These related to an *electricity sub-station* (32m north), a *chimney* (43m southwest) and *St. Pancras hospital* (82m southwest). It was considered that none of these sites represented a significant contamination risk to the subject site.

The site walkover undertaken by RSK noted a fuel tank (diesel) set on a concrete plinth to the northwest of the main warehouse. However, no visual or olfactory evidence of hydrocarbon spillage/leakage was observed. No other potentially significant ground contamination or geotechnical issues were identified.

The scope of the RSK ground investigation included three cable percussion boreholes to depths of between 10mbgl and 25mbgl (with gas and groundwater monitoring wells installed in each) and eleven hand dug foundation trial pits.

The ground investigation recorded Made Ground from surface approximately 2.4m to 3.3m in thickness, overlying the London Clay Formation to depth. Variable perched groundwater was recorded within the Made Ground horizon above the impermeable underlying London Clay Formation.

With the exception of ash fragments, no visual or olfactory evidence of contamination was encountered within the Made Ground. The results of chemical testing on five samples of the Made Ground were compared against the RSK 'residential (with communal soft landscaping)' generic assessment criteria (GAC) and only PAHs, principally benzo(a)pyrene, were noted to exceed the GACs. Inspection of soil samples at the laboratory identified the presence of loose asbestos fibres (chrysotile) within the Made Ground in one location (0.001% asbestos in TP9 at 0.8m bgl). Elevated PAHs were also noted in the perched groundwater in the Made Ground. However, it was considered by RSK that, as the basement excavation will remove the majority of the source material, the PAHs and asbestos were not considered to pose a risk to future users, or controlled waters, except in the areas of proposed landscaping, outside the basement box and should Made Ground remain at formation level. The risk to construction workers was slightly higher due to their being more likely to come into contact with contaminated soils. The removal of the source was also considered to remove the risk with regards to water supply pipes; however, RSK noted that the relevant water supply company were contacted to confirm requirements. CGL note that if water pipes are located in residual Made Ground, then specific pipe materials may be required.

Two trial pits were undertaken in the immediate vicinity of the above ground fuel storage tank in the northwest of the site, extending to a maximum depth of 1.4m bgl. No visual or olfactory evidence of hydrocarbon contamination was encountered in the Made Ground in these exploratory holes and laboratory

testing of soils did not record the presence of any significant mobile hydrocarbon contamination that could potentially impact human health.

Four gas and groundwater monitoring visits (two initial visits between May and June 2014 and two subsequent visits between June to July 2014) were undertaken which identified elevated concentrations of carbon dioxide and localised significantly elevated concentrations of methane. Additional ground gas monitoring visits were undertaken on site between June and July 2017 to address the elevated recordings of methane concentrations. It was concluded that these elevated ground gas concentrations were attributed to organic rich Made Ground deposits on site in this area, however, as the majority of the Made Ground will be removed to form the basement on site (removing the potential source) no specific gas protection measures, over and above the tanked/vented basement construction, were deemed necessary.

In addition to the above, reduced concentrations of oxygen were recorded during the monitoring, with the lowest being 4.3%vol. Therefore, it is considered that during the excavation works, air quality should be regularly monitored, and if necessary ventilation systems employed.

### **Remediation Method Statement**

Based on the RSK report, the proposed remediation strategy for the site comprises:

1. Provision of barrier layers in areas of soft landscaping to protect future users from elevated concentrations of contaminants and asbestos fibres recorded in the Made Ground.
2. Protection of underground services by specification of suitable materials, e.g. composite barrier pipe, where placed within the residual Made Ground, subject to confirmation by the water supply company.
3. Materials management of basement arisings in accordance with the waste hierarchy, Duty of Care Regulations and Waste Regulations.
4. Watching brief and discovery strategy.
5. Implementation of environmental controls and health and safety procedures to protect construction workers and adjacent site users from potential risks associated with dust, vapours and nuisance odours.

#### *Provision of barrier layers*

Due to the presence of asbestos and contamination identified within the Made Ground, proposed areas of communal landscaping, outside the basement box and over existing Made Ground, will be provided with suitable topsoil and subsoil to form a capping layer.

Where Made Ground remains at formation level, the capping layer will comprise a minimum 450mm of imported subsoil including a minimum of 150mm topsoil at the surface with a geotextile marker layer at the base.

Where natural soils are present at formation level the capping layer is not required, however, a minimum of 150mm topsoil will be placed to form a growth medium. The formation level will be verified through visual inspection by a suitably qualified geoenvironmental engineer. In areas of landscaping above the basement box or on roof terraces, the thickness of the growth medium should be confirmed by the landscape architect; however, a minimum of 150mm topsoil will be required.

The subsoil/topsoil imported to form the capping layer will be uncontaminated soil from a known and reputable source. Chemical certification via test results for the source material and details of the source will

be provided by the Contractor prior to capping material being brought to site. Topsoil will conform to the requirements of BS 3882<sup>2</sup>.

Once placed, the capping layer and growth medium will be subject to verification by a qualified geoenvironmental engineer. Inspection pits will be dug to verify the capping layer thickness and growth medium construction and the capping soils will be sampled at a frequency of one sample per four garden plots. The soils will not contain contaminant concentrations that exceed the maximum permissible SGVs and GACs appended to this letter.

To protect the integrity of the capping layer and growth medium, placement will commence after installation of foundations and drainage works.

#### *Protection of buried services*

Due to the concentrations of organic contaminants encountered in the soils, the use of barrier pipes for water supply, such as Protectaline, is likely to be required in residual Made Ground to prevent possible permeation of residual organic contaminants into drinking water supplies. This will be confirmed with the local water supply company.

#### *Materials management*

In order to minimise the volumes of soils being disposed to landfill facilities, it is prudent to consider material management options prior to waste disposal. Screening of uncontaminated natural arisings may permit recycling/re-use of the material on site or at other sites under the CL:AIRE protocol and would lead to a reduction in disposal requirements.

If off-site disposal of excavated soils is unavoidable, the Contractor will be responsible for the appropriate classification of the waste. Additional testing may be required to confirm the preliminary waste assessment.

Uncontaminated natural materials can be classified as listed inert for waste disposal purposes.

A preliminary assessment of the Made Ground samples analysed by RSK indicates that the majority of material would be classified as non-hazardous material for disposal purposes. Although the pH is generally greater than 11.5, which would result in a hazardous waste classification (H8 corrosive hazardous waste), the Made Ground contains pieces of crushed concrete, which are the likely source of the elevated pH. In this case, the material can be classified as non-hazardous waste as concrete is a non-hazardous waste entry 17 01 01 within the List of Wastes.

Two samples of Made Ground from the site were submitted for WAC analyses. The results indicate that the Made Ground would fail the inert leaching limits and would therefore be classified as non-hazardous waste. However, we do note that one sample recorded elevated total organic carbon and loss on ignition values and it will be necessary to confirm the actual classification with prospective landfill operators prior to disposal. The material may also be acceptable to a soil treatment facility; however, this should be confirmed with appropriate facilities.

Loose asbestos fibres (chrysotile) were encountered within the Made Ground in TP9 at 0.8m bgl. This material was analysed at an accredited laboratory and the % composition of asbestos in soil was determined to be 0.001%. As such, this material would be classified as non-hazardous.

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<sup>2</sup> British Standards (2015) BS 3882. *Specification for topsoil and requirements for use.*

It should be noted that in May/June 2012 HMR&C issued Briefs 15/12 and 18/12 clarifying how construction spoil and excess soils will be assessed for landfill tax purposes. Detailed accurate descriptions of waste are required for all wastes to support the landfill tax assessment. Uncontaminated naturally occurring soils will remain inert by default and eligible for the lower rate of landfill tax. Similarly 'reworked soils' and demolition 'stone' comprising ONLY materials listed in the Schedule of the Landfill Tax (Qualifying Material) Order 2011 (SI 2011/1017) will also be eligible for the lower rate of landfill tax.

However, Made Ground containing soil and foreign objects such as timber, plastic, rubber, metal, paper, plasterboard, asbestos, etc., regardless of the results of chemical analysis for waste classification purposes, will be eligible for the standard (higher) rate of landfill tax. Therefore, to maximise eligibility for lower rate landfill tax on waste construction spoil/ reworked ground, careful waste segregation and controls are necessary.

All material intended for off-site disposal should be transported and disposed in accordance with the Environmental Protection (Duty of Care) Regulations, 1991 and the Landfill (England and Wales) Regulations, 2002 (as amended). Waste legislation stipulates that hazardous and not hazardous waste should be pre-treated prior to disposal. Pre-treatment can be undertaken either at the site of origin or may be carried out at a licensed off-site facility and can include selective excavation or segregation of soils conducted on site.

#### *Watching brief and discovery strategy*

It is recommended that a watching brief is maintained by the Main Contractor. Where unexpected gross contamination, such as oily material, material of an unusual colour or odour, or potential asbestos containing material, is encountered, the following discovery strategy is recommended:

1. Work to cease in that area.
2. Notify geo-environmental engineer, to attend site and sample material for appropriate analysis and risk assessment. Notify Contaminated Land Officers of the Local Authority as appropriate.
3. If required by the risk assessment, geo-environmental engineer to supervise the excavation of contaminated material, which should be placed in a bunded area and covered to prevent rainwater infiltration.
4. Soil samples should be obtained by the geo-environmental engineer from both the excavated material, and the soils in the sides and base of the excavation to demonstrate that the full area of contamination has been excavated. Where appropriate, in-situ testing should be undertaken on the sides and base of the excavation to assess the presence of residual contamination in the soils.
5. On receipt of chemical test results, the soils may be classified for disposal, or treatment if appropriate, and dealt with accordingly.
6. Detailed records of the stockpile sizes, source and location should be kept and regularly updated to allow materials to be easily tracked from excavation until leaving the site.
7. Records of excavated areas and the results of chemical testing should be incorporated within the final verification report for the site.
8. If no discoveries are made, this should also be documented as part of the verification process.

To facilitate appropriate waste disposal and potential re-use of materials all excavated soils should be segregated and stockpiled depending on their soil classification.

### *Health & Safety*

All site works should be undertaken in accordance with the guidelines prepared by the Health and Safety Executive (HSE, 1991)<sup>3</sup> and CIRIA Reports 132<sup>4</sup> and C650<sup>5</sup>. All work should also be carried out in accordance with the Contractor's Construction Health and Safety Plan and current asbestos regulations<sup>6</sup> and guidance<sup>7, 8</sup>.

During the redevelopment, precautions should be taken to minimise exposure of workers and the general public to potentially harmful substances. Attention should also be paid to restricting possible off-site nuisance such as dust and odour emissions. Such precautions should include, but not be limited to:

1. Personal hygiene, washing and changing procedures.
2. Adequate personal protective equipment, including disposable overalls, gloves and particulate filter masks/vapour respirators, where required.
3. Measures to avoid surface water ponding and positive collection and disposal of all on-site run-off.
4. Regular cleaning of all site roads, access roads and the public highway including dust suppressions methods (e.g. water spraying), if necessary.
5. All waste haulage vehicles should be covered when leaving the site to minimise the release of airborne particulates.

Site staff undertaking groundworks should be advised of the potential for Asbestos Containing Materials (ACMs) to be encountered, be trained in basic visual recognition of ACMs and provided with suitable respiratory protective equipment (RPE).

It is noted that the contractor may be required to assess the risk of handling and removing asbestos containing soils, should they be encountered, and should implement appropriate control measures. An assessment will need to be undertaken to determine whether the works would be notifiable under the HSE's Control of Asbestos Regulations<sup>6</sup> and hence require a specialist contractor to undertake the works. Asbestos containing soils should be dampened down when handled to prevent fibre release, taking care that the dampening down is undertaken in an appropriate manner, time and with suitable amounts of water to suppress dust and fibre release but not saturate the soils. As far as reasonably possible, soil movements should be minimised and double handling avoided. In the event that ACMs are encountered, the risk assessment must be updated and methodology revised accordingly including re-assessment of the notifiable/ licensable status of the works.

### *Verification*

To confirm that the measures and procedures detailed in this document have been implemented, a Verification Plan has been produced and is appended to this letter. Site inspections and compliance testing will be carried out during the works by a qualified geoenvironmental engineer for the various elements of the remediation works as follows:

- Verification of capping layer/growth medium thickness and imported soil chemical acceptance (including visual inspection of formation level where natural ground encountered) and
- Site inspection records, photographs and testing where unexpected contamination is encountered.

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<sup>3</sup> Health and Safety Executive (HSE), (1991). Protection of Workers and the General Public During the Development of Contaminated Land. Guidance Note HS(G)66

<sup>4</sup> Steeds J.E., Shepard E., Barry D.L., (1996). A Guide for Safe Working on Contaminated Sites. CIRIA Report 132.

<sup>5</sup> CIRIA, (2005). Environmental Good Practice – Site Guide, 2<sup>nd</sup> Edition. CIRIA Report C650.

<sup>6</sup> Health and Safety Executive, (2012). The Control of Asbestos Regulations.

<sup>7</sup> Health and Safety Executive, (2006). Asbestos: The Licenses Contractor's Guide. Guidance Note HSG247.

<sup>8</sup> Health and Safety Executive, (2006). Work with Materials Containing Asbestos, Control of Asbestos Regulations 2006 Approved Code of Practice and Guidance.

Documentation will also be required to be provided by the Contractors including:

- Confirmation of pipework material and acceptance of material choice by water supply company;
- Photographs of the earthworks undertaken;
- As built drawings;
- Duty of Care records for the disposal of soils (including contractor/hauler licenses and permit for receiving facilities, as applicable);
- Source data and pre-import laboratory data of any imported soil; and
- Material management procedures (i.e. permits, exemption etc.) as appropriate.

On completion of the remediation works, a Verification Report will be prepared. This report will detail the works undertaken and will include copies of all relevant information listed above including waste transfer records, inspection records and photographic evidence.

This document will be made available to regulators as required, as evidence of the works carried out, and will eventually form part of the health and safety file for the site.

We trust that we have provided sufficient information for discharge of Planning Condition 21, but please do not hesitate to contact us if you have any queries.

Yours sincerely

A handwritten signature in black ink, appearing to read 'S Key', is positioned above the typed name.

Sarah Key, Principal Engineer  
Card Geotechnics Limited

Enc. *Capping import specification*  
*Verification Plan*

**Table 1. Maximum permissible concentrations for imported capping layer soils.**

Determinant	Maximum permissible concentration <sup>1</sup> (mg/kg) <sup>2</sup>		Rationale	
	Residential without plant uptake			
	6% SOM	1% SOM		
Arsenic	35	35	GAC <sup>4</sup>	
Beryllium	88	88	GAC <sup>4</sup>	
Boron	5	5	Limit for phytotoxic effect <sup>5</sup>	
Cadmium	87	87	GAC <sup>4</sup>	
Chromium (III)	3,300	3,300	GAC <sup>4</sup>	
Chromium (VI)	6.3	6.3	GAC <sup>4</sup>	
Lead	310	310	C4SL <sup>10</sup>	
Mercury	250	250	GAC <sup>4</sup>	
Selenium	600	600	GAC <sup>4</sup>	
Copper	135 <sup>3</sup>	135 <sup>3</sup>	BS 3882:2007 Specification for Topsoil <sup>3</sup>	
Nickel	75 <sup>3</sup>	75 <sup>3</sup>	BS 3882:2007 Specification for Topsoil <sup>3</sup>	
Zinc	200 <sup>3</sup>	200 <sup>3</sup>	BS 3882:2007 Specification for Topsoil <sup>3</sup>	
Vanadium	1100	1100	GAC <sup>4</sup>	
Benzo(a)pyrene	3.6	3.6	GAC <sup>4</sup>	
Benzo(a)anthracene	22	18	GAC <sup>4</sup>	
Benzo(b)fluoranthene	23	23		
Benzo(k)fluoranthene	23	23		
Chrysene	230	220		
Dibenzo(a,h)anthracene	2.3	2.2		
Indeno(1,2,3-cd)pyrene	23	26		
Naphthalene	35	6.3		
TPH aliphatic <sup>6</sup>	EC5-6	260		80
	EC>6-8	750	160	GAC <sup>4</sup>
	EC>8-10	190	34	GAC <sup>4</sup>
	EC>10-12	1,000 <sup>7</sup>	1,000 <sup>7</sup>	Hazardous waste threshold <sup>7</sup>
	EC>12-16	1,000 <sup>7</sup>	1,000 <sup>7</sup>	Hazardous waste threshold <sup>7</sup>
	EC>16-35	1,000 <sup>7</sup>	1,000 <sup>7</sup>	Hazardous waste threshold <sup>7</sup>
TPH aromatic <sup>6</sup>	EC5-7	3.2	0.88	GAC <sup>4</sup>
	EC>7-8	1,000 <sup>7</sup>	870	GAC <sup>4</sup> / Hazardous waste threshold <sup>7</sup>
	EC>8-10	310	55	GAC <sup>4</sup>
	EC>10-12	1,000	290	GAC <sup>4</sup> / Hazardous waste threshold <sup>7</sup>
	EC>12-16	1,000 <sup>7</sup>	1,000 <sup>7</sup>	GAC <sup>4</sup> / Hazardous waste threshold <sup>7</sup>
	EC>16-21	1,000 <sup>7</sup>	1,000 <sup>7</sup>	GAC <sup>4</sup> / Hazardous waste threshold <sup>7</sup>
	EC>21-35	1,000 <sup>7</sup>	1,000 <sup>7</sup>	Hazardous waste threshold <sup>7</sup>
Sum of TPH aliphatic & aromatic C5-C10	< 1,000	< 1,000	Hazardous waste thresholds <sup>8</sup> (C10+ MPC based on threshold for C25+)	
Sum of TPH aliphatic & aromatic C10+	< 1,000	< 1,000		
pH	5-10	5-10		
Phenols	6,000	2,000	GAC <sup>4</sup>	
Asbestos	No detectable fibres <sup>9</sup>			

## Notes:

- These maximum permissible concentrations (MPCs) are import criteria only and are not necessarily appropriate for human health risk assessment.
- In mg/kg dry soil except pH and asbestos.
- British Standard BS3882:2015 Specification for Topsoil and requirements for use. Table 1. Values taken for pH 6-7.
- Generic Assessment Criteria generated 'in-house' based on CLEA model Version 1.06. Barium and total cyanide GACs are derived from previously endorsed human health risk assessment models and are conservative values with reference to Dutch Intervention Values.
- Nable, Banuelos and Paul. (1997). *Boron Toxicity*. Plant and Soil, Vol. 193, pp1 81-198.
- Speciated TPH values must not exceed GAC, or hazardous waste threshold, where indicated above. Assessment of TPH must be made against hazardous waste threshold to confirm imported soils do not classify as hazardous material.
- GAC derived MPC for TPH fraction limited to 1,000mg/kg based on 'waste thresholds'.
- Environment Agency. (2007). *A Guide to Hazardous Waste Regulations: How to find out if waste oil and waste that contain oil are hazardous*. HWR08.
- Laboratory screen by microscopy may be required subject to source of material.
- Published C4SL for lead (DEFRA, 2014)



Reference	Principal requirements	Remediation or construction related	Site visit required by qualified geoenvironmental engineer	Supporting documentation
<b>1.0 General principles</b>	<p>The site is being developed for an 11-storey mixed used development with a basement and associated soft and hard landscaping.</p> <p>The site remediation requirements are as follows:</p> <ul style="list-style-type: none"> <li>• Provision of barrier layers to protect future users and vegetation from contaminants and asbestos fibres in the Made Ground.</li> <li>• Protection of underground services by specification of suitable pipe materials, if required.</li> <li>• Materials management of basement arisings.</li> <li>• Watching brief and discovery strategy.</li> </ul>	Remediation & construction	<p><b>YES</b></p> <ul style="list-style-type: none"> <li>• As detailed below</li> </ul>	Details of construction programme to be provided by client/contractor.
<b>2.0 Compliance with legislation</b>	The construction and remediation activities on the site will be undertaken in accordance with current health and safety and environmental legislation.	Remediation & construction	-	-
<b>3.0 Health and Safety requirements</b>	This verification plan does not specifically cover health and safety requirements. This will be addressed in the Contractor's Health and Safety Plan.	Remediation & construction	-	-
<b>4.0 Capping layer/growth medium</b>	<p><b><i>Communal soft landscaping – capping layer (where Made Ground remains at formation level)</i></b></p> <ul style="list-style-type: none"> <li>• 150mm topsoil</li> <li>• 300mm subsoil</li> <li>• Geotextile (Terram 1000 or similar) placed at the base.</li> </ul> <p><b><i>Communal soft landscaping – growth medium (where Made Ground not present)</i></b></p> <ul style="list-style-type: none"> <li>• Min 150mm topsoil</li> </ul> <p>In areas of landscaping above the basement box or on roof terraces, the thickness of the growth medium should be confirmed by the landscape architect; however, a minimum of 150mm topsoil will be required.</p> <p>Additional topsoil can be substituted for the subsoil; as long as the minimum total soil thickness is maintained.</p>	Remediation & construction	<p><b>YES</b></p> <ul style="list-style-type: none"> <li>• To validate construction of capping layer/formation level</li> <li>• To take samples for chemical analysis</li> <li>• Testing at a frequency of 1 per 250m<sup>2</sup> of each type of soil used or minimum 3 per source.</li> </ul>	<p>Source certificates and pre-delivery test data (to be provided by Contractor)</p> <p>Site visit records including photographs</p> <p>Chemical test results</p> <p>Layout drawings showing location of areas of soft landscaping</p>

Reference	Principal requirements	Remediation or construction related	Site visit required by qualified geoenvironmental engineer	Supporting documentation
	Topsoil/subsoil will be soil imported from a known and reputable source. Concentrations within 'as received' material must be below the Maximum Permissible Concentrations detailed in the import specification.			
<b>5.0 Underground services</b>	The water supply company should be provided with copies of the ground investigation report so that they can make the necessary provisions to safe guard their installations.	Construction	-	Confirmation of pipework material and acceptance of material choice by water supply company.
<b>6.0 Watching brief and discovery strategy</b>	<p>A watching brief will be maintained by the Main Contractor. Should any previously unidentified gross contamination, such as asbestos, oily material or material of an unusual colour or odour, be encountered during excavation, the following strategy is recommended:</p> <ol style="list-style-type: none"> <li>1. Work to cease in that area.</li> <li>2. Notify Geoenvironmental Engineer, to attend site and sample material in case it is spread around. Notify Contaminated Land Officers of the local authority.</li> <li>3. Geoenvironmental Engineer to supervise the excavation of contaminated material, which should be placed in a bunded area and covered to prevent rainwater infiltration.</li> <li>4. Soil samples should be obtained by the Geoenvironmental Engineer from both the excavated material and the soils in the sides and base of the excavation to demonstrate that the full area of contamination has been excavated. If appropriate, in-situ testing should be undertaken on the sides and base of the excavation to assess the presence of residual contamination in the soils.</li> <li>5. On receipt of chemical test results, the soils may be appropriately classified for treatment or disposal, and dealt with accordingly.</li> <li>6. Detailed records of the stockpile sizes, source and location should be kept and regularly updated to allow materials to be easily tracked from excavation until leaving the site.</li> <li>7. Records of excavated areas and the results of chemical testing should be incorporated within the final verification report for the site.</li> </ol>	Remediation	<p><b>YES</b></p> <ul style="list-style-type: none"> <li>• To inspect areas and take samples</li> </ul>	<p>Site visit records including photographs</p> <p>Chemical test results</p> <p>Duty of care records for disposal/treatment of waste, including permits for receiving facility and haulage contractor.</p> <p>Additional risk assessments, if required</p>

Reference	Principal requirements	Remediation or construction related	Site visit required by qualified geoenvironmental engineer	Supporting documentation
<b>7.0 Waste disposal and materials management</b>	All material bound for disposal to landfill will require characterisation in accordance with the Hazardous Waste Regulations 2005 and disposal in accordance with the requirements of the Landfill Regulations (2002, as amended) and the Environmental Protection (Duty of Care) Regulations, 1991.	Remediation & construction	<b>YES</b> <ul style="list-style-type: none"> <li>Should additional classification of arisings be required prior to disposal or sampling of soils prior to re-use on site</li> </ul>	Duty of care records for disposal of waste, including permits for receiving facility and haulage contractor.  Chemical test results  Copy of Environment Agency notification registering site as a hazardous waste producer