

Ref: 70018922-P01

Date 6 May 2016

CONFIDENTIAL

[REDACTED]
Homes and Communities Agency
Leeds City Region and North Yorkshire Team
Lateral 8 City Walk,
Leeds
LS11 9AT

Three White Rose Office Park
Millshaw Park Lane
Leeds
LS10 0DP

[REDACTED]
www.wspgroup.com
www.pbworld.com

Dear [REDACTED]

Subject: Ground Investigation Fee Proposal – Rockingham, Barnsley

WSP Parsons Brinkerhoff is pleased to provide the following proposal for Ground Investigations at the Homes and Communities Agency's (HCA) site in Rockingham, Barnsley (the site).

BACKGROUND

The HCA is currently in the process of marketing the site for sale, which is to be split into separate development plots as Barnsley Metropolitan District Council (BMDC) is to construct a new road through the site. The proposed road scheme will split the site into three separate plots as defined below:

- Plot 1: 1.52ha – Commercial proposed end use;
- Plot 2: 4.78ha – Commercial proposed end use; and,
- Plot 3: 1.58ha – Residential or commercial proposed end use.

As part of the road development BMDC has requested that a compound to support the works is placed on Plot 1. The HCA is therefore considering commissioning further ground investigation on Plot 1 in advance of this compound being set up to provide potential purchasers with further information to inform potential abnormal development costs.

Historical ground investigation data and backfilling records are available for the plot. However, a number of gaps in the information exist and therefore further investigation is required to better characterise the potential ground related risks and more accurately cost potential abnormal development costs.

GROUND INVESTIGATION PLOT 1

The aim of the ground investigation is to obtain information to further characterise the potential contaminated land and geotechnical issues and allow abnormal development costs to be more accurately formulated.

The specific objectives of the investigation are to:

- Further characterise ground conditions to understand the depth, composition and strength of the backfill to the former opencast excavation;
- To investigate for the presence of potential contamination associated with the site, particularly contaminants not previously tested (i.e. asbestos, cyanide, benzo(a)pyrene);
- To assess for the presence of groundwater and whether a shallow groundwater table is present beneath the plot;
- Assess ground gas concentrations to inform potential ground gas protection measures;

- Assess the potential for spontaneous combustion of the shallow fill; and,
- To provide information to support outline foundation options to a potential purchaser.

SCOPE OF WORKS

To facilitate the project aims and objectives we propose the following scope of works:

ITEM 1 – HEALTH & SAFETY PLANNING

At the outset of the commission, project health and safety plans will be developed to identify / summarise known hazards. The fieldwork will then be assessed to attempt to avoid site specific hazards and associated risk wherever possible. If it is not possible to avoid a risk, then the risks will be evaluated and the design will incorporate measures to control or mitigate risks as far as reasonably practicable.

All proposed exploratory locations will be cleared by a suitably qualified service clearance engineer using cable avoidance tool and ground penetrating radar to avoid underground services as far as practicable. In preparing this proposal it has been assumed that current service plans will be available for the site and no allowance has been made for undertaking a statutory service search.

ITEM 2 – INTRUSIVE GEO-ENVIRONMENTAL INVESTIGATION

The ground investigation has been scoped to obtain information to further characterise both the geotechnical and contaminated land conditions. Based on information obtained to date the following scope of intrusive works is proposed.

Table 1: Ground investigation and associated rationale Plot 1

Ground investigation Scope	Rationale
Drill up to five dynamic sample boreholes to the base of the fill with three with rotary follow on into the bedrock.	<ul style="list-style-type: none"> • Determine the thickness and nature of fill across the plot. • Assess shallow rock properties; • Installation of monitoring wells to determine potential presence of groundwater (if encountered) and monitor ground gas • Obtain soil samples of Made Ground for chemical analysis. • Obtain groundwater samples for chemical analysis, if encountered. • Undertake in-situ geotechnical testing.
Progress up to 10 CPT positions across the site	<ul style="list-style-type: none"> • Investigate fill depth and further characterise geotechnical properties of underlying fill. • To provide indication of likely settlement risk.

Five exploratory holes will be installed with standard 50mm HDPE tubing and finished with secure covers. The monitoring wells will subsequently be utilised to monitor ground gas and groundwater levels on four occasions. Groundwater samples will also be obtained on one occasion should groundwater be encountered.

During excavation activities the soil arisings will be recorded and logged in accordance with BS5930:2015 and any visual or olfactory evidence of contamination will be noted. All intrusive works will be supervised by a WSP | Parsons Brinckerhoff consultant. Up to 12 soil samples will be collected

for chemical analysis and, if encountered, up to 4 groundwater samples collected on one occasion. The proposed chemical sample schedule is as follows:

- Soil: heavy metals, speciated polycyclic aromatic hydrocarbons (PAHs); asbestos screen, pH, Soil Organic Matter (SOM), cyanide and selected samples for Total Petroleum Hydrocarbons Criteria working Group (TPHCWG) and BTEX;
- Groundwater: heavy metals, PAHs, pH, cyanide, TPHCWG (including BTEX).

Field screening of soil samples will be carried out on site using a PID (headspace test), the results of the testing will influence the scheduling of the organic analysis and the requirement to schedule volatile organic contaminants.

Geotechnical testing will be carried out on selected samples, subject to the material arising properties. The geotechnical testing will include but not be restricted to the following: calorific value testing, PSDs, pH and soluble sulphate.

ITEM 3 FACTUAL & INTERPRETATIVE REPORTING

It is proposed to produce a combined factual and interpretative report. The factual elements of the investigation will be presented within the report and soil logs and field data included within appendices. The interpretative section of the report will provide an environmental assessment based on the field and laboratory data obtained and provide commentary on the geotechnical properties, potential outline foundation options associated with a future commercial development.

FEE & EXPENSES

A fee estimate has been produced to undertake the works and is provided below. All prices are exclusive of VAT.

Plot 1 Ground Investigation & Reporting Fee & Costs

Item	Fee (£)	Cost (£)
Plot 1		
Health and safety planning		
Utility clearance, setting out and surveying		
Ground Investigation (inc. drilling, CPT, welfare, supervision and equipment costs)		
Laboratory Analysis (soils, water and geotechnical)		
Groundwater / Gas monitoring (4 visit)		
Factual & Interpretative Reporting		
Total		

Principal Assumptions

Please note that in preparing this proposal, we have made the following assumptions.

- The provided costs will be treated as a fixed lump sum for the fixed scope of works as specified herein;
- This quotation remains valid for 30 days from the date of this letter;
- Invoices will be raised at monthly intervals. An approximate invoice schedule can be provided on request.
- The proposed fees for the works described are exclusive of VAT but are inclusive of travel, subsistence and other disbursements;

- No allowance has been made for the attendance of client or project team meetings. The fees and expenses will be charged at a rate agreed with the Client;
- It has also been assumed that access to the exploratory locations will be available on firm ground, without any ecological, noise or archaeological constraints;
- WSP | PB reserve the right to recoup any costs incurred as a result of the cancellation or delay of previously instructed (either verbal or written) elements of the aforementioned works;
- No allowance has been made for the clearance of vegetation or creation of platforms or other costs to enable access and safe working conditions;
- No allowance has been made for reinstatement of the exploratory locations beyond backfilling trial pit excavation with arisings. In particular, the reinstatement of the trial pits will consist of them being backfilled and left slightly heaped. No allowance has been made for reinstatement to an 'as found' condition of these pits or access routes across the site;
- It is assumed that no special provision for health and safety or for fencing off the working area is required other than delineating it using cones, or for the provision of fencing on-site following completion of the works;
- Site work can be undertaken during normal working hours of 8.00am to 6.00pm Monday to Friday and that continuity of work can be maintained. Should any works need to be conducted outside these times then WSP reserve the right to amend the appropriate elements of the attached quotation accordingly;
- Access and permissions to the site will be agreed and provided to WSP | PB prior to commencement of the works;
- It has been assumed that unrestricted site access will be given to the plant listed above for the duration of the works;
- Natural soil arisings can be left on ground surface with no requirement for a skip or disposal;
- No provision has been made to provide a tracked excavator or for reinstatement of the ground if rutting occurs during the works nor for any compensation due to crop damage or protection to livestock;
- This investigation will include, as a precautionary measure, the screening of soil samples for the presence of asbestos. Any samples scheduled for asbestos identification will incur an additional cost of £80/sample, any additional analysis will be agreed with the client before proceeding. Factual commentary on the presence/absence of asbestos fibres will be included in the report, however the formal inspection and assessment of the site for risks relating to asbestos is excluded from this proposal. Formal asbestos assessment and advice is a separate technical discipline and fee stream which WSP would be happy to provide but have, at this time, excluded from our deliverables; and,
- It should be noted that if the site investigation encounters any unexpected ground conditions then further or alternative work might be recommended, which may affect the cost or scope of our proposal.

PROGRAMME

The Investigation should be delivered within eight to ten weeks from a formal instruction, subject to gaining access and subcontractor availability. We currently have the works scheduled to start on May 24th.

NOTES ON CDM

- The Construction (Design & Management) Regulations 2015 (CDM 2015) place responsibilities on all parties to a construction contract (including clients, designers, contractors and sub-contractors). Within this context the term "construction contract" encompasses a broad range of activities including ground investigation.
- Under the regulations, whilst the client is not required to manage or supervise the works, it is recognised that the client exerts a significant influence over the way a project is carried out. In summary, the responsibilities of the client under the regulations include:
 - Appointing a Principal Designer with the requisite skills, knowledge and experience (to plan, manage and co-ordinate the design elements) in writing as early as possible in the process;
 - Appointing (where there will be more than one contractor on site) a Principal Contractor with the requisite skills, knowledge and experience (to plan, manage and co-ordinate the construction elements) in writing as early as possible in the process (to assist in co-ordinating with the Principal Designer);

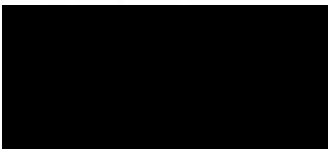
- Providing pre-construction information as soon as practicable to every designer and contractor appointed (or being considered for appointment);
 - Ensuring sufficient time and resources are allocated to the project;
 - Ensuring a Construction Phase Plan is drawn up before construction (work) begins;
 - Ensuring the Principal Designer prepares a Health and Safety File for the project; and
 - Notifying the HSE before commencement of construction if the construction work will last longer than 30 days with more than 20 workers on site at the same time or will involve more than 500 person days of work (HSE guidance for clients in this respect is available at: <http://www.hse.gov.uk/pubns/indg411.pdf>).
- With respect to this project, the CDM 2015 Regulations are applicable and since there will be more than one contractor carrying-out works on the project then the appointment of a Principal Designer and a Principal Contractor is required. We have assumed that WSP | Parsons Brinckerhoff are required to fulfil the role of Principal Designer and Principal Contractor for the elements of the project covered by this proposal. A fee allowance has been included in our cost submission to fulfil the role of Principal Designer. In the event that a Principal Designer for the project is already appointed the overall fee will be reduced accordingly and we will require contact details of the Principal Designer to enable us to fulfil our duties as a Designer and the Principal Contractor.
- Otherwise formal appointment in writing under this proposal will be deemed to include appointment as Principal Designer and Principal Contractor for the enclosed scope of works.

NOTES ON TERMS AND CONDITIONS

The proposed works will be completed in accordance with the terms and conditions as part of the framework agreement

The provided costs will be treated as a fixed lump sum for the fixed scope of works as specified herein.

Thank you for providing WSP | Parsons Brinckerhoff with the opportunity to provide the above proposal. We trust the proposed scope meets your current requirements, should you require any further information please do not hesitate to contact me. We look forward to hearing from you.



Principal Consultant Ground Risk & Remediation

