

ORACLE SHOPPING CENTRE, READING

RIVERSIDE REDEVELOPMENT

GROUND CONTAMINATION STATEMENT

Prior to commencement of the Oracle Riverside Redevelopment, a Phase 2 Generic Qualitative Risk Assessment (GQRA) will be commissioned.

From an environmental viewpoint, the main objectives of the Phase 2 investigation will be:

- To assess the nature and degree of soil and shallow water contamination on the site;
- Where applicable, to assess the levels of gases and vapours within the ground, and assess the potential for lateral migration of gases;
- To obtain background groundwater quality, and determine risk based target levels as part of the remedial strategy;
- To confirm the environmental impact potential on existing and potential local receptors (on and off site), identified by a source-pathway-receptor analysis (Tier 2 generic qualitative risk assessment);
- To recommend additional requirements for a more comprehensive risk assessment if deemed necessary;
- To confirm requirements for site remediation and formulate a remedial options appraisal for the site, if required, setting risk based remedial targets for principal contaminants of concern identified by a qualitative risk assessment.

The scope of works will include:

- A review of existing site data, site history, environmental issues and considerations;
- An intrusive site investigation involving the installation of cable percussive boreholes and/or window sampling boreholes, the excavation of hand dug trial pits and possibly plate bearing tests/CBR;
- Chemical analysis of selected soil and groundwater samples for a suite of contaminants at a MCERTS/UKAS accredited laboratory (based on the findings of the site's historical review and environmental setting);
- Compilation of supplementary geotechnical data, utilising a combination of in-situ and laboratory testing;
- Groundwater level and gas/vapour monitoring at well locations (gas monitoring undertaken in accordance with CIRIA guidance C665 (2007));

- In accordance with the requirements of the EA's Contaminated Land Report 11 (CRL11) and Guiding Principles for Land Contamination (GPLC 1-3 inclusive), undertake a ground contamination risk assessment for the site to determine the levels of risk to potential receptors including humans, the water environment or the built environment;
- The findings of the Geo-environmental intrusive investigation, together with the results obtained from historical assessments, will be used to provide a sufficient level of information to undertake a Phase 2 Generic Qualitative Risk Assessment (GQRA) of the identified potential risks in accordance with the EA's CLR11 and Guiding Principles for Contaminated Land (GPLC 1-3 inclusive);
- Provision of an indication of 'Waste Classification' as required by 'Duty of Care' legislation (Environmental Protection Act 1990) or the most recent current legislation;
- During the intrusive investigations, samples were obtained to allow an assessment of the risk to buried concrete and services by reference to guidance given in BRE Special Digest 1, EA Technical Report P5 035/TR/01, BRE Report BR255 and WRAS Information and Guidance Note 9-04-03.