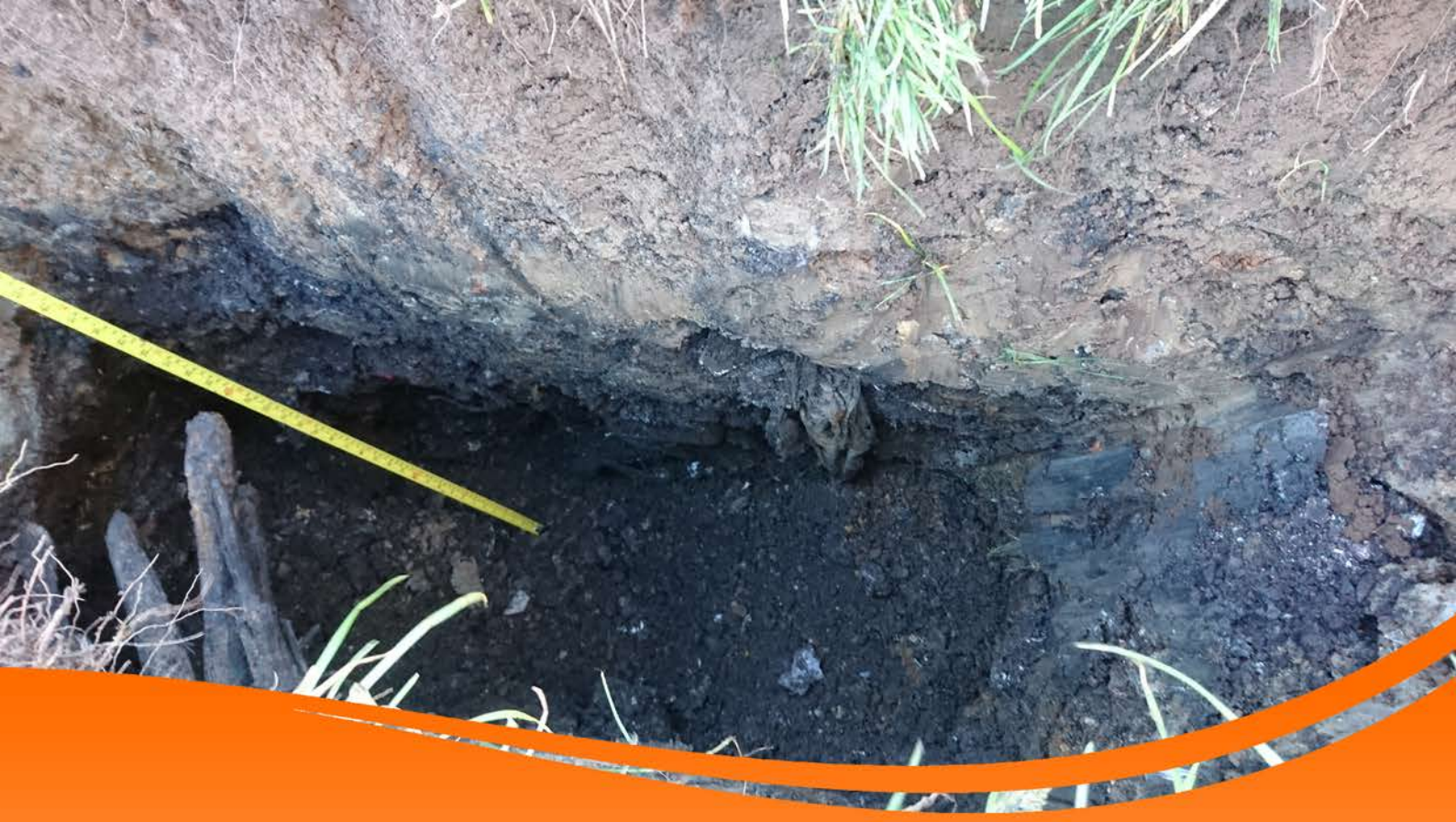


GPT Environmental Management Services

Site Investigation Case Study Phases I & II

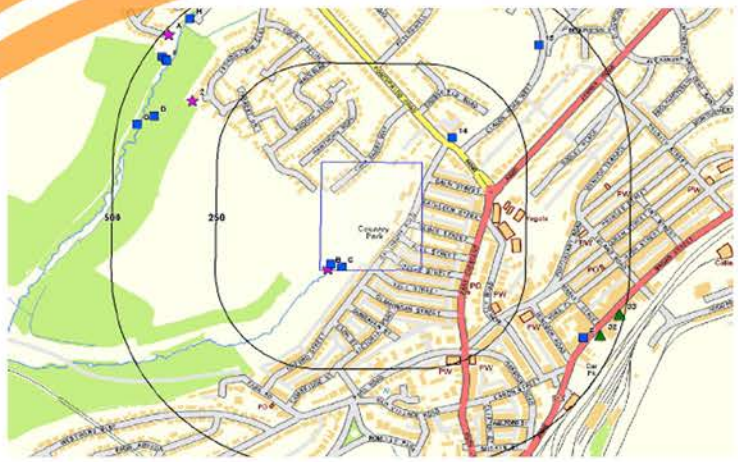
Summary

Our client, a local authority, wanted to build a new playground facility in a country park. As part of a planning condition they were required to assess if there was any contamination present. Our phase I desktop survey discovered the land had previously been used as a landfill site.

A phase II study was conducted by advancing trial pits in order to ascertain the levels of contamination and the human health risks the development would pose to future site users.

Our phase II study found that there was contamination present; however, the contamination varied between trial pits and was only present at a depth which posed no risk to future site users.

Environmental Management Services



Phase II - Intrusive Investigation

A Phase II intrusive site investigation was conducted in order to identify the presence and extent of contamination. Trial pits were chosen as the most suitable investigation methodology.

A total of 5 Trial pits were advanced to a maximum depth of 1.50m at different locations within the proposed location of the park. Shallow (between 0-0.30mbgl) and deep (between 1 – 1.5mbgl) soil samples were taken in order to provide coverage of strata.

The Phase I desktop survey allowed us to target our soil analysis to include TPH, Heavy Metals, PAHs and pH.

The sample analysis found that some of the trial pits had minor levels of contamination but only at a depth which posed no risk to future site users.

The survey identified an elevated risk to site workers during construction. Therefore a construction phase plan was recommended prior to commencements of works.

Phase I - Desktop Survey

During the Phase I survey the previous usage of the site was ascertained as far back as 1880. As much information as possible was gathered on the history of the site which found the site had previously been used as a domestic landfill site.

This allowed identification of Chemicals of Concern (COCs) in order to target our sample analysis suite for the phase II intrusive survey.