

# Ground Investigation Surveys

**Geotechnical and Geoenvironmental investigations** are an essential starting point for the design of any construction project. Technics' new in-house Geoscience Department is responsible for undertaking geotechnical and geoenvironmental site investigations and reports for clients on the ground conditions of their sites, enabling them to appropriately manage risks due to geology and contamination.

Before a site is re-developed the first step should be commissioning a ground investigation. Specialist engineers and geologists collect information on a range of vital factors that can affect any project, including:

- Geology
- Soil consistency, strength and structure
- Groundwater
- Potential for contamination

Our ground investigations cover both geotechnical and geoenvironmental factors.

A **geotechnical investigation** is primarily concerned with testing the physical properties of the soil, to provide recommendations for foundation requirements, excavation stability, drainage and buried concrete design.

A **geoenvironmental investigation** mainly focuses on the chemical properties of the soil or groundwater, to assess the risk of harm to human health or the environment.



## Why do I need a ground investigation?

A ground investigation is of particular importance to developers, landowners and construction companies as the findings can be used to avoid potential problems from unforeseen ground issues.

Data obtained from the investigation is used to generate a ground model which is then used to provide expert, cost-effective recommendations for the construction and design of a project. Ultimately, a good understanding of the geotechnical and geoenvironmental conditions of a site will result in a more efficient and economical project.

## What does a ground investigation include?

A ground investigation is a combination of desk-based research and thorough investigations, tailored to fit the specific needs of the project. The stages we offer include :

**Desktop Study** - The first stage of a ground investigation is the provision of a desktop study. This desk-based research is a very cost effective way to gain an initial understanding of the site, which can then be used to determine the anticipated ground and groundwater conditions and whether there is likely to be a risk from contamination.

**Factual Report** - the next stage is an actual ground investigation whereby our engineers physically inspect the ground and take samples for testing which are then collated to form a Factual Report. Samples are obtained through boreholes, window sample holes, probing and trial pits, with the investigation methodology and testing specifically selected for each site.

**Interpretative Report** - Whilst the Factual Report shows the current site conditions, the next stage of the process is where our expert engineers can really add value to your project, with a detailed interpretation of the factual data. The interpretative report comprises the analysis and assessment of factual data against specific criteria for the proposed development scheme to develop site-specific recommendations.

**Detailed Assessment** - The final stage takes the interpretative report a step further by delivering a detailed assessment of the conditions at the site for a specific situation.

## Why use Technics?

With Technics, you won't just receive a report. Our expert engineers are on hand to interpret and translate the report and offer you the advice you need. When you choose Technics we can confidently say you are talking to real experts.

When opting for a ground investigation, it is important to consider the other services you need alongside it such as utility detection and topographical surveys. Both of which are essential before conducting a ground survey. Fortunately the team at Technics can provide the full package.



**From topographic and measured building surveys to utility detection and vacuum excavation... the team at Technics can do it all.**

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*Have more questions about what could be included in your ground investigation? Contact our team of experts at our Guildford office on **01483 230 080** or email **[enquiries@technicsgroup.com](mailto:enquiries@technicsgroup.com)***

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