

Geotechnical Engineering

Atkins has a large number of geotechnical specialists who offer a comprehensive service in ground technology.

Our **Foundations and Substructure Engineering** team has a wide range of skills covering projects of all sizes. We employ, investigation, design and analytical tools best suited to the demands of the task in hand. Using state-of-the-art numerical modelling techniques, we have undertaken the design of foundations and substructures at the most demanding end of the spectrum, right through to the production of construction drawings and bar bending schedules.

Our **Advanced Geomechanics and Offshore Geotechnics** teams provide a state-of-the-art analysis and numerical modelling capability. We specialise in modelling soil-structure interactions using the finite element and finite difference methods, which give a much better understanding of soil-structure behaviour than conventional methods.

These techniques are essential for major projects and in situations where soil conditions and structural types are unusual. They can often help clients achieve significant savings in the construction time and cost of permanent works. In recent years, our teams' expertise has led to our involvement in several Joint Industry Projects for major oil companies and the Health & Safety Executive.

Engineering Geology and Geohazards Engineering have become an important part of our work as clients are increasingly aware of the need to manage ground hazards and risk at all stages in a project's life-cycle. Our expertise is multidisciplinary. It encompasses the geomorphological, geological and analysis skills needed to identify and quantify hazards, plus the engineering skills needed to identify and design mitigation and remedial measures.



Our **Highways, Rail and Rivers & Coastal Geotechnics** teams provide comprehensive support to all aspects of Atkins' infrastructure engineering consultancy. We have a considerable track record, encompassing:

- initial feasibility studies
- desk studies
- ground investigations
- route optioneering
- feasibility design
- detailed design
- construction supervision

In addition, our teams provide the geotechnical expertise needed for the management and maintenance of infrastructure assets on behalf of the Highways Agency and local government, Network Rail and London Underground, water companies and the Environment Agency.

In the provision of **Expert and Due Diligence Services** we can draw upon the substantial resources of Atkins covering virtually every engineering and scientific discipline.

Our services fall into three main categories:

- project review and audit to project funders, including due diligence
- advice to insurers and their loss adjustors in claims evaluations
- expert witness support to lawyers involved in arbitration and litigation proceedings, including giving expert testimony if required

Contact -

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