

What we can offer

Atkins is one of the leading providers of professional, technologically-based consultancy and support services in the world.

We employ over 18,000 staff throughout our offices worldwide. We are well positioned to undertake a diversity of projects, with a multidisciplinary team spread across a network of offices throughout the UK and overseas in the Americas, Asia and South East Asia, Western Europe, Central and Eastern Europe, and the Middle East.

Geotechnical Skills & Services

- engineering geology & geohazards
- environmental geotechnics
- engineering geomorphology
- advanced geomechanics
- rock & soil slope stabilisation
- earthworks
- foundations & substructure engineering
- highways geotechnics
- rail geotechnics
- river & coastal geotechnics
- offshore geotechnics
- water supply & sewerage geotechnics
- nuclear geotechnics
- tunnel & shaft engineering
- due diligence & expert witness



Key Contacts

For further details regarding our capabilities please email:
geotechnicalengineering@atkinsglobal.com



Office Locations

UK & Ireland

Our UK & Ireland offices include:

Aberdeen	Crewe	Haverfordwest	Northampton	St. Asaph
Altrincham	Croydon	Ipswich	Nottingham	Stockton-On-Tees
Barking	Cumbria	Knutsford	Oxford	Swansea
Belfast	Derby	Leeds	Peterborough	Swindon
Birmingham	Dublin	London	Plymouth	Taunton
Bristol	Edinburgh	Maidstone	Pontypridd	Telford
Cambridge	Epsom	Manchester	Reading	Warrington
Cardiff	Exeter	Newcastle-under-Lyme	Sale	Warwick
Chelmsford	Gillingham	Newcastle-Upon-Tyne	Scunthorpe	Winchester
Chippenham	Glasgow	Newport	Sheffield	York
Colwyn Bay	Gloucester		Southampton	
Cork	Havant			

ATKINS

Geotechnical Engineering



Plan Design Enable

A Selection of Project Experience

Railway Embankment Stabilisation, Ilkley, UK

Atkins was commended by the Institution of Civil Engineers for “excellence in concept design and execution” of the stabilisation measures for a railway embankment crossing a 1km wide landslide complex, on a key commuter route into Leeds. The railway was suffering continuous ground movement associated with landsliding which originally started about 10,000 years ago after the last ice age.



Azadegan Oilfield and Pipelines, Iran

Atkins assembled a multidisciplinary team of geologists, geotechnical engineers, hydrologists and surveyors to assist a Japanese consortium in the feasibility and design phases of this oilfield development.

We provided:

- geotechnical and geohazard expertise for pipeline route selection
- hydraulic modelling of river and over-bank flooding as part of the site selection studies
- seismic hazard study for facility sites and pipelines
- geotechnical site investigation supervision, interpretative reporting and preliminary geotechnical design for the main facilities site

A Selection of Project Experience

M6 Toll - Birmingham Northern Relief Road

The M6 Toll project is a design, build, finance and operate scheme that links Junctions 4 and 11 on the M6. Atkins was responsible for the geotechnical design of the northern half of the 42km long new motorway. There was a wide variation in ground conditions along the route which included several brownfield sites and the infilled Streetway and Kingswood opencast coal mines to the southwest of Cannock. Consequently, a flexible approach was adopted for the geotechnical work so that both design and construction could be optimised and costs reduced.

Sukkur Barrage, Pakistan - Remedial Works

Sukkur Barrage diverts water from the River Indus into a series of canals which are used to irrigate some 13,500 square miles of land. Recently, due to insufficient maintenance dredging, silt was allowed to build up and restrict inflow to some of the canals. One result of this was scour affecting nearby structures.

We advised on piling, general geotechnics and construction of the remedial works. We also supervised installation of an array of vibrating wire piezometers (to monitor critical groundwater levels) and generated an instrumented seepage model to assess and control de-watering and prevent further damage.

Our personnel on site also advised the Client and Pakistani Army, who were undertaking the work, on a range of practical construction aspects.



A Selection of Project Experience

Burj Al Arab Tower, Dubai

Atkins was responsible for the design and project management of major works for the Jumeirah Beach Resort Development in Dubai. Centrepiece of the prestigious project is the sail-shaped Burj A Arab Hotel, located on its own man-made island. It was designed to be the tallest hotel in the world, its atrium enclosing a space large enough to house London's famous BT Tower.

Our geotechnical activities included:

- site investigation
- seismic hazard study
- foundation and substructure design
- construction supervision and monitoring
- commissioning

Cwm Relief Road, South Wales, (Cover-and-Fill Tunnel)

A critical part of the Cwm Relief Road project comprises a 122m long concrete arch cover-and-fill tunnel which supports a roundabout above the Newport to Ebbw Vale railway line. Variable and difficult ground conditions, combined with a marginally stable valley side at the tunnel location and its proximity to a live railway, presented considerable challenges in the geotechnical design.

Atkins' geotechnical specialists made appropriate use of numerical modelling techniques to:

- verify and refine the foundation design in conjunction with limit equilibrium calculations; and
- improve the reliability of predictions of structural design forces and ground movements as a means of achieving a safe and economical design solution.

