

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

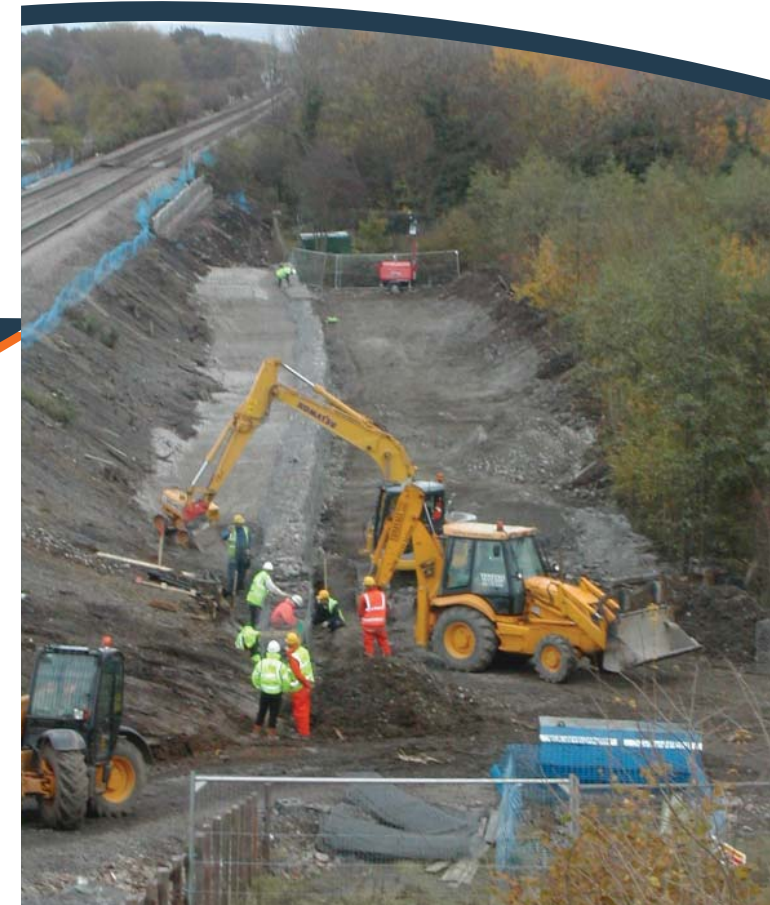
UK & Ireland

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

Soil Slope Engineering



Plan Design Enable

Project Experience

Natural terrain landslide hazards - Disneyland Project, Hong Kong

An area of 100ha of natural terrain on Lantau Island was assessed for the presence of landslide hazards and their implications for the water supply facilities of the Disneyland Project.

The aims of the assessment were:

- To judge the most likely sources of natural terrain landslides and to identify their likely frequencies, magnitudes and mechanisms
- To determine the paths that debris flow landslides would follow and estimate travel distances
- To determine the potential risk to life and economic risk and to evaluate the merit of landslide mitigation measures by cost-benefit analysis.

A12 Colchester Northern Bypass, Essex - slope failures

Atkins was appointed by the Highways Agency to design remedial measures for two full height rotational slope failures located within cuttings adjacent to Colchester's Northern Bypass. We reviewed available information about the sites, specified and supervised a ground investigation and designed and supervised construction of the remedial works.



Project Experience

BTC Oil Pipeline, Republic of Georgia

Atkins designed and carried out geomorphological, geological and geotechnical investigations of the oil pipeline's corridor in an area of landsliding near Borjomi in the Lesser Caucasus Mountains. Working with our client, we managed a team of specialists, reported the findings to the project's pipeline engineers who were making decisions about the detailed routing of the pipeline, and presented the results to external parties, including the Georgian Academy of Sciences. We seconded geotechnical personnel into the client's team responsible for detailed design and on-site supervision during construction.

Cwm Relief Road, South Wales

A critical part of the Cwm Relief Road project was a 122m long precast concrete arch cover-and-fill tunnel needed to support a roundabout above the Newport to Ebbw Vale railway line. The marginally stable valley side at the tunnel location and its proximity to the live railway presented considerable challenges in the geotechnical design.

After carefully characterising the slope's stability Atkins' geotechnical specialists made appropriate use of numerical modelling techniques to:

- verify and refine the foundation design and slope stability calculations; and
- improve the reliability of predictions of structural design forces and ground movements as a means of achieving a safe, economical and buildable structure.



Project Experience

Peru LNG Terminal, near Chincha Alta, Peru – landslide and seismic hazards

The export pipeline for the liquified natural gas terminal crosses a zone of ancient very large coastal landslides that were reactivated by construction of cut and fill earthworks. Atkins was asked to provide an independent review of the causes and design consequences of the landsliding. During the course of the work, the project site was subjected to the effects of the magnitude 8.0 earthquake whose epicentre was only a few tens of kilometres away. Our field reconnaissance observations of the landsliding, the post-earthquake monitoring by the project's designers, and our office-based analyses enabled us to advise our client on revised geotechnical design criteria for the pipeline.

Landslide stabilisation on the Isle of Wight

During heavy weather a coastal landslide began to move at Bouldnor on the Isle of Wight. The landslide moved again later in the year, with its crest encroaching to within a few metres of people's homes. The seawall at the landslide's toe was also badly damaged. We designed and supervised a site investigation and identified the nature of the slope failure. Based on this information, we designed remedial works to provide a new coastal revetment and slope profile. The works incorporated stabilisation measures which comprised rows of soil nails through the unstable ground and deep counterfort drains to reduce the water table in the slope.

