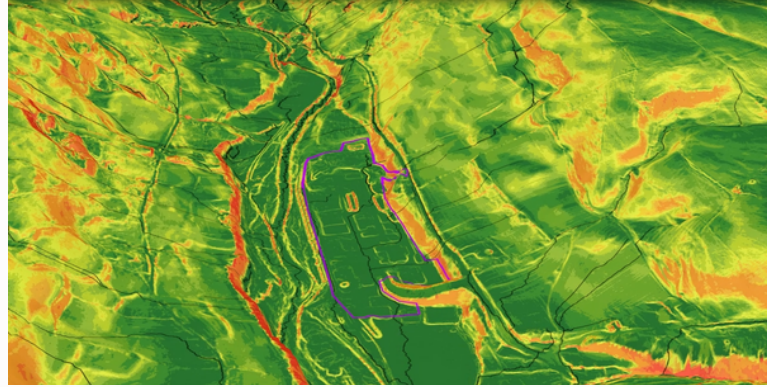


# GROUND RISK ASSESSMENT

Magnum GSI's ground risk assessment services offer clients accurate and comprehensive insights into geotechnical hazards and risks. With our technical expertise, customized approach, and commitment to timely delivery, we are a trusted partner in helping clients mitigate ground-related risks and ensure the success of their projects.

## Our Services

- 1 **Site Investigation:** We conduct thorough site investigations to gather geotechnical information, including soil and rock properties, groundwater conditions, and geological features. Our team utilizes advanced techniques and equipment to collect data, ensuring a comprehensive understanding of the ground conditions.
- 2 **Geotechnical Risk Assessment:** We perform detailed geotechnical risk assessments that identify and evaluate potential hazards such as landslides, ground instability and slope failure. By analysing site-specific factors and historical data, we assess the likelihood and consequence of risks to determine their impact on project success.
- 3 **Groundwater Assessment:** We evaluate subsurface water conditions and dynamics to assess the potential impact on project stability and performance. Our groundwater assessments focus on evaluating groundwater levels, flow patterns, and potential interaction with structures to mitigate risks associated with water-related issues.
- 4 **Geotechnical Modelling and Analysis:** Our team utilises geotechnical modelling and analysis software to simulate and predict ground behaviour under various scenarios. This helps us understand potential movements, stress distribution, and deformation, supporting the design and implementation of effective risk management measures.
- 5 **Geotechnical Reporting and Recommendations:** We provide detailed reports that summarise our findings, risk assessments, and recommendations. Our reports offer clear guidance on risk mitigations, optimal design, slope stability measures, and other geoscientific solutions tailored to our clients' specific needs.
- 6 **Regulatory Compliance:** We have a strong understanding of regulatory and industry standards. Our assessments ensure compliance with these requirements, facilitating approval processes and helping clients meet the necessary regulatory obligations.



## Our Approach

Our team of experts employs a methodology, leveraging technology-enhanced assessments for bespoke, timely ground risk solutions, as follows:

- **Technical Expertise:** Our geotechnical engineers possess vast knowledge and experience in ground risk assessment. We stay updated with the latest industry advancements and leverage our expertise to deliver accurate and reliable assessments and recommendations.
- **Comprehensive Approach:** We consider a wide range of geotechnical factors, integrating geology, ground conditions, and historical data into our assessments. This comprehensive approach enables us to provide clients with a holistic understanding of ground risks for their projects.
- **Customised Solutions:** We understand that every project has unique requirements. Our team collaborates closely with clients, taking into account their specific objectives, budgetary constraints, and timelines to deliver tailored solutions that address their ground risk challenges.
- **Timely Delivery:** We recognize the importance of timely information for effective decision-making. With streamlined processes and efficient project management, we ensure that our ground risk assessments are delivered within agreed-upon timelines, enabling clients to proceed with confidence.

