



clarkebond

## ground engineering

Our ground engineering capability covers condition assessment and engineering of the ground, including geotechnics, contamination assessment, geology, hydrology, hydrogeology, and waste soils assessment.

Our development services cover pre-site acquisition, pre- and post-planning stages, validation/verification of any remediation and other risk reduction measures, addressing the aspirations of developers and regulatory bodies (e.g. planning authorities and Environment Agency.)

Our specialist geotechnical and geoenvironmental engineers, apply their skills to the specific challenges of both greenfield and brownfield sites, where comprehensive assessment and investigation is required to identify and define the ground risks and measures to overcome them. Even greenfield sites can contain risks from mining, natural geological hazards, nearby landfills, heavy metals, etc.

## services

- Expert Witness.
- Due Diligence reports & Phase 1 desk studies.
- Specialist (e.g. SiLC) independent review of 3rd party reports.
- Design & management of Phase 2 site investigations.
- Quantitative contaminated land risk assessment: soil & water.
- Assessment of risks from landfill gases and chemical vapours.
- Asbestos in Soils: assessment and advice.
- Remediation: strategies/method statements & validation.
- Regulator liaison, pre- and post- planning.
- Earthworks & ground improvement: design, manage, validate.
- Foundation & retaining wall analysis/design & risk assessment.
- Other geotechnical assessment & design (e.g. ground stability).
- Drainage assessment: soakaways, SUDS, foul drainage fields.
- CL:AIRE DoWCoP assessment for inter-site soil transfers/reuse.
- Material Management Plans and classification of waste soils.
- Coal Mining Risk Assessments.
- Crane/piling platform design & validation.

*"You always provide a highly professional standard of work that is attentive to our requirements and you take trouble to understand our needs before you act under our instructions. You are first on our list for geotech consultancy and site investigation report work on our projects."*

**Gary Rumbell, Cavendish & Gloucester Properties**

## how we add value

- We deliver practical and innovative solutions to complex problems.
- We have a commercial appreciation of our clients' requirements.
- We have a depth of expertise to mitigate risk.  
([SiLCs](#) and [Qualified Persons](#))

## example projects

- Barnhill Quarry residential development:

We provided a commercially viable solution for this 30m deep quarry infill project by creating a level platform for residential development within 12 weeks of filling completion. [More](#)

- Bridgwater cellophane landfill site:

We developed innovative solutions to overcome significant ground issues resulting from the historic uses of this contaminated site to enable commercial development of a retail centre. [More](#)

- civil engineering
- structural engineering
- facade engineering
- geoenvironmental engineering
- environment & sustainability
- engineering management
- resilience & recovery
- infrastructure & drainage
- transport planning
- BIM

For more information please go to [www.clarkebond.com](http://www.clarkebond.com) or call **0117 929 2244**