



When do you need a geotechnical engineer?

Geotechnical engineering, or the science involving the behavior of soils and other earth materials, has an impact on every construction site or project. Geotechnical engineers perform materials testing and special inspections relative to the building codes, project plans and specifications during the construction process.

S-E-A's staff has extensive expertise that is uncommon in the forensic field in the design and construction of foundation systems, earthwork operations, and construction issues. We can assist clients with design and/or construction defect cases, construction-related failures, or standard of care issues.

For more information, call **800.782.6851** or visit **SEAlimited.com**



The study of landslides/slope stability analysis either in naturally occurring or constructed slopes, is critical to the success of projects with grade changes.



Attention to retaining wall design and construction is essential for successful completion of a project.



Proper design and construction of deep foundation systems such as drilled shafts (caissons), driven piles, auger-cast piles, rammed aggregate piers, etc. is vital to timely and cost-efficient construction and structure performance.



REVEALING THE CAUSE. MITIGATING THE RISK.

Engineering, Investigation and Analysis since 1970

Know.



Geotechnical Services and Investigations

Earthwork and Grading Operations

- Earth fill placement per plans and specifications
- Soil compaction (density) and laboratory testing
- Fill performance issues
- Sinkholes
- Blasting and vibration-related damage
- Stormwater runoff/drainage issues
- Cost overruns resulting from earthwork or excavation

Trench/Excavation Issues

- Braced excavations
- Settlement of adjacent structures
- Groundwater and dewatering issues
- Swimming pools

Shallow and Deep Foundation Systems Evaluations

- Building settlement issues
- Design and construction issues of conventional shallow foundations or deep foundation systems such as driven/auger cast-in-place piles, drilled shafts, and aggregate columns

Retaining Wall Failures

- Mechanically stabilized earth (MSE), segmental, concrete, sheet pile, soil nail, tieback, and gravity walls

Soil Stabilization Projects

- Cement/chemical stabilization issues, including failure to perform
- Expansive soils – shrinkage/swelling issues resulting from the stabilization operations

Landslides

- Constructed slopes/cut slope failures
- Mitigation/repair options

Pavement Failures

- Asphalt/concrete pavement failures
- Pumping, rutting, cracking, and service life issues
- Pavement design issues

Concrete and Masonry Failures

- Curling, spalling, surface finish failures, and flatness/levelness issues of pavements and floor slabs
- Concrete pumping issues
- Mix design and strength issues

Our Specialists



Mark Drotar, P.E.
Sr. Civil/Geotechnical Engineer

Cleveland, OH

- Bachelor and Master of Science degrees in Civil Engineering, specializing in geotechnical engineering – State University of New York at Buffalo
- Registered professional engineer in many states
- Member of the American Society of Civil Engineers (ASCE)
- Member of the American Society of Civil Engineers (ASCE) Construction Institute (CI)
- Member of the American Society of Civil Engineers (ASCE) Geo-Institute (G-I)
- Provided expert testimony in local, state, and federal courts as well as arbitration and mediation casework



Jason Ball, P.E.
Sr. Civil/Geotechnical Engineer

Atlanta, GA

- Bachelor of Science degree in Civil Engineering, specializing in geotechnical engineering – Georgia Institute of Technology
- Registered professional engineer in many states
- ICC Commercial Building Inspector, Level IB Erosion Control Inspector, a member of the American Concrete Institute (ACI), and concrete floor flatness measurement inspector
- Associate Member of ACI Committee 302 (Construction of Concrete Floors)
- Associate Member of ACI Committee 311 (Inspection of Concrete)
- Provided expert testimony in arbitration and state courts of law