



# GEOTECHNICAL ENGINEERING

GFA International brings decades of experience providing expert geotechnical solutions to complex projects of all sizes, whether public or private. The technical expertise of our team, our specialized training, our fleet of equipment and wide scope of capabilities has assisted our clients in finding solutions to difficult and complex challenges on a variety of projects.

GFA's geotechnical engineers and geologists are skilled in defining and executing field exploration programs to provide cost-effective solutions to geotechnical challenges. Our goal is to provide practical design recommendations for safe and stable structures, and oftentimes we are able to recommend innovative options for your project. Our unique approach of field engineering reconnaissance and test drilling observation provides a high degree of confidence that subsurface anomalies are identified on the front end of a project. This gives our clients better preparation at the time of construction.

**TeamGFA.com** ◆ **(800) 226-7522**



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INTERNATIONAL  
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GFA owns and operates one of the largest and most diverse fleets of drilling equipment in the state. By owning, operating and maintaining our own equipment, we can deliver the highest quality product in a more cost-effective and timely manner by eliminating unnecessary subcontractor costs and delays. Our fleet includes track and truck-mounted equipment and limited access rigs for tight spaces, low overhead conditions, and over-water work allowing us to access almost any drill site. In addition to direct push and conventional drilling, GFA also offers Sonic drilling services. Our drill crews are experienced in handling a wide range of geologic situations in a variety of settings; their drilling experience combined with state-of-the-art technological capabilities means we successfully complete jobs even under the most difficult drilling conditions.

Our geotechnical team is driven by the importance of on-time, quality reports that are reviewed by senior engineers and geologists to make certain that solid engineering and valued recommendations are provided to our customers. GFA can provide the following geotechnical services:

**Geologic / Hydrogeological**

- ◆ Geotechnical Subsurface Explorations
  - Preliminary and Site Reconnaissance
  - Subsurface Soil Investigations
  - Foundation Design and Recommendations
  - Soil Improvement/Modification Techniques
- ◆ Slope Stability Analysis
- ◆ Slurry Wall Verification Drilling
- ◆ Monitoring Well Installation
- ◆ Recovery Well Installation
- ◆ Vacuum Extraction Well Installation
- ◆ Environmental Drilling
- ◆ Sinkhole Studies
- ◆ Geotechnical Forensic Engineering
- ◆ Subcontract Drilling Services

**Geotechnical Drilling/Sampling and Testing**

- ◆ Test Pits
- ◆ Auger Borings
- ◆ Wash Borings
- ◆ Rock Cores
- ◆ Muck Probes
- ◆ Vibracoring
- ◆ Cone Penetration Tests (CPT)
- ◆ Standard Penetration Tests (SPT)
- ◆ Plate Load Test (PLT)
- ◆ Permeability Test
- ◆ Consolidation Test
- ◆ Shear Strength Test
- ◆ Shelby Tube/Split Spoon
- ◆ Double Ring Infiltrometer Tests
- ◆ Exfiltration Tests (FDOT and SFWMD)
- ◆ Infiltration Tests (FDOT and SFWMD)

**Sitework Monitoring and Earthwork Observation**

- ◆ Pile Installation & Load Tests
- ◆ Pile Driving Analyzer (PDA)
- ◆ Vibratory Compaction & Vibration Monitoring

**Geophysical Services**

- ◆ Pre and Post Construction Surveys
- ◆ Ground Penetrating Radar (GPR)
- ◆ Seismic Monitoring
- ◆ Geologic Mapping
- ◆ Crosshole Sonic Logging

**Beach Renourishment Quality Control**

- ◆ Turbidity Monitoring
- ◆ Vibration Monitoring
- ◆ Existing Building Structural Surveys
- ◆ Laboratory Testing (for grain size)
- ◆ Munsel Color
- ◆ Carbonate Content