

# Laboratory Testing Services

GeoTesting Express, Inc. (GTX), provides rapid laboratory and field testing services of materials below the ground surface to determine their physical and mechanical properties for site characterization, geotechnical design, quality control, and performance assessment.

## 10 Reasons to Perform Geotechnical Testing

1. Establish baseline site conditions
2. Provide engineering parameters for design
3. Determine feasible means to improve existing conditions
4. Determine compliance with regulations
5. Provide quality control
6. Provide quality assurance
7. Troubleshoot construction problems
8. Assess a Differing Site Condition
9. Determine cause of unacceptable performance
10. Develop new materials and methods for construction

## Capabilities of GeoTesting Express' Geotechnical Testing Services

### Testing Services:

- Design testing programs
- Prepare specifications for testing programs
- Perform lab and field testing programs
- Review and evaluate data from testing programs
- Develop recommended engineering parameters from results of testing
- Provide instrumentation systems to monitor field performance

### Typical Services:

- Determine design strength & compressibility for soft clay foundations
- Determine amount & rate of consolidation of dredge soils
- Perform dynamic testing for marine foundations
- Provide quality control for construction of landfill liner & cap systems
- Provide strengths for design of deep supported excavations in soft soils
- Measure resilient modulus for pavement design
- Provide quality control services for installation of geosynthetic materials
- Develop mixes of recycled materials for their use as construction products
- Develop bentonite-cement-soil mixes for seepage barriers
- Determine cause of failure of mechanically stabilized walls
- Measure specific site conditions to assess a differing site condition claim
- Organize and conduct site investigations to define underground conditions for design and construction
- Determine strength & compressibility of rock cores for tunnel construction
- Install field instrumentation to monitor movement, pore pressures, strains, forces, cracks and vibrations

