



## Geotechnical Engineering & Engineering Geology

**GMU performs comprehensive Geotechnical Engineering services and has over 50 years of experience evaluating soil and rock conditions.**

Our complete range of services is applied before, during and after construction to verify stability, meet performance goals, and reduce the potential for unexpected problems. GMU's Engineering Geologists and Geotechnical Engineers are specialists in evaluating soil, rock and groundwater conditions for proposed and existing developments. From the planning and design phase through construction and beyond, GMU has the specialized expertise needed to ensure the job is done right the first time.

- Comprehensive Experience with Virtually All Types of Private Development and Public Works Structures
- Full Range of Geotechnical Services
- GMU is Known for Complex Geotechnical Analysis and Dealing with Difficult Sites

### Select Projects

#### Master Planned Communities

- Ladera Ranch and Las Flores
- Rancho Mission Viejo
- Newport Coast/Crystal Cove
- Santaluz
- Talega

#### Transportation

- Cow Camp Road and Chiquita Canyon Bridge
- La Pata Gap Closure Roadway and Bridges
- Bake Parkway and Lake Forest Drive Roadway and Bridges
- Laguna Niguel Metrolink Station

#### High Rise Commercial

- 200 & 400 Spectrum Center Towers and Parking Structure
- 650 Newport Center Office Tower and Parking Structure
- 20-40 Pacifica Office Towers and Parking Structure
- Capital Group Corporate Campus

#### Civic Centers

- Laguna Niguel
- Chino Hills
- Rancho Santa Margarita

#### Harbors

- Dana Point Harbor Revitalization
- Marina Park Harbor and Sailing Center

#### Water Infrastructure

- Trampas Canyon Dam/Reservoir
- Gobernadora Multipurpose Basin
- Santa Ana-Delhi, Fullerton Creek and Barranca Channel Levee Improvements
- Chiquita & Tesoro Tank Reservoirs

#### Hotels

- Lido House
- Inn at the Mission
- Irvine Marriott
- Hyatt House Irvine

### LIST OF SERVICES

- Site Exploration
- Field Inspection and Testing
- Slope Stability and Landslide Analysis
- Liquefaction Analysis
- Foundation Engineering
- Groundwater/Dewatering Studies
- Infiltration Testing
- Seismic Refraction/Hard Rock Studies
- Fault Investigations

### SPECIALTY SERVICES

- Seismic Hazard Analyses and Earthquake Engineering
- Expert Witness Services
- Geotechnical Instrumentation
- Stormwater QSP/QSD Services
- Construction Vibration/Blast Consulting
- Numerical Modeling (FLAC, PYWall, LPILE)
- Ground Improvement Evaluation