



GEOTECHNICAL AND GEOSTRUCTURAL SERVICES



CAPABILITIES

Geocomp has more than 40 years of experience solving some of the world’s most challenging geotechnical problems. We apply our design expertise and in-depth geotechnical knowledge of soil, rock, and water interaction to provide a comprehensive assessment of underground conditions and potential hazards in ways that produce practical recommendations and help our clients identify and manage their risks.

Our Expertise

Our geotechnical engineers provide geotechnical advice and support to your project team using a Best Applicable Practices (BAP) approach to help develop foundation designs that minimize unnecessary conservatism without introducing unacceptable risks in the following areas:

- Geotechnical investigations
- Subsurface characterization
- Shallow and deep foundations
- Soil improvement
- Liquefaction and earthquake risk assessment
- Dam and impoundment design & safety assessments
- Slope stability and rehabilitation
- Retaining structures
- Complex geotechnical systems
- Flow through porous media
- Advanced finite element modeling
- Digital twins
- GIS data management
- Active Risk Management®
- Expert services



Industries

Geocomp services the following industries:

- Commercial Development
 - » Buildings
 - » Warehouses
- Transportation
 - » Bridges
 - » Tunnels
 - » Slopes and Embankments
- Renewable Energy
 - » Dams
 - » Wind Farms
- Waste Containment Facilities
 - » Coal Combustion Residuals
 - » Mine Tailings
 - » Solid Waste Storage
- Forensic Engineering
- Mining
- Research and Development



For more than 40 years, Geocomp has been a trusted partner in mitigating risk inherent in infrastructure.

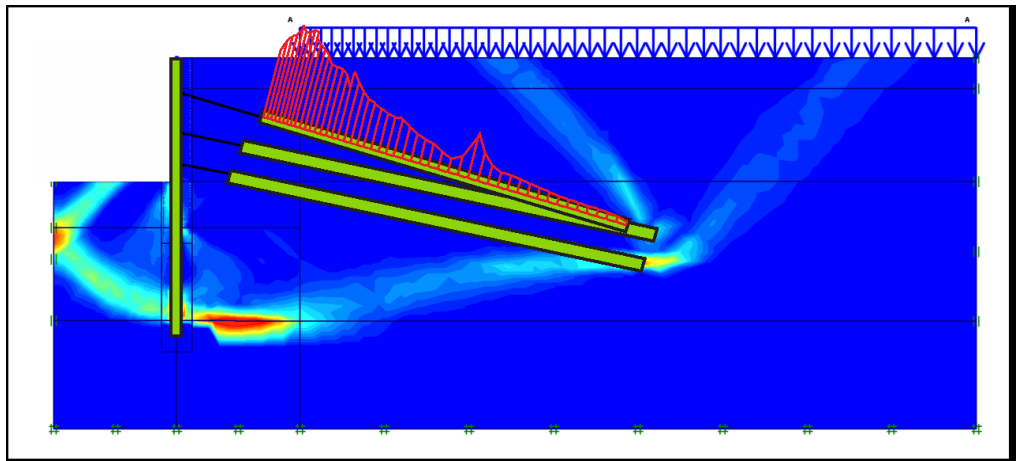
RELIABLE
EXPERIENCED
VALUE-DRIVEN
INNOVATIVE

Active Risk Management®

Through Active Risk Management®, Geocomp provides quantitative identification of risks and their potential impacts to project costs, schedule, and quality. Active Risk Management® is a process to identify, monitor, and manage risks throughout the life of projects associated with construction in the natural and built environments.

Geocomp helps the project team:

- Develop quantified assessments of potential risk events, likelihood, and consequences
- Monitor risk elements and warning indicators
- Identify risk mitigation strategies
- Produce real-time data on emerging risks to inform decision making
- Develop a risk management framework for the project life cycle



Finite Element Analysis of Tiedback Retaining Wall

EXAMPLE PROJECTS

- The Colony Retaining Walls
- Cox Tower Deep Excavation
- East Side Access Subway
- Wheaton Station Tunnel
- NCHRP MSE Walls
- TVA Coal Ash Impoundments
- Richland Creek Dam
- Fukushima Nuclear Plant
- Revelstoke MSE Wall
- I-93 South Station
- Palo Verde Reservoir
- Second Ave Subway
- Oroville Dam Spillway Fail
- Tonen Kawasaki Refinery
- Ontario Power Plant
- Woodrow Wilson Bridge
- I-90 Bridge, Cuyahoga River
- Hickory Log Creek Dam
- Champlain Towers Collapse
- Brumadinho Tailings Dam

EXPERIENCE YOU CAN TRUST

Revelstoke MSE Wall Project

Geocomp was retained to provide expert services for the corrosion evaluation of the welded wire MSE walls in Revelstoke, British Columbia which included:

- A boring and laboratory testing program developed and executed to determine the electrochemical properties of the reinforced fill at five (5) walls
- Corrosion monitoring stations installed through the face into the reinforced fill at all eight (8) walls to facilitate linear polarization resistance (LPR) measurements to identify the real-time rate of corrosion that might be occurring in the primary metallic reinforcements

Our team of experts worked with the client to determine the root cause and develop a plan of action to extend the useful life beyond original design.



Revelstoke MSE Wall

Tennessee Valley Authority Project

Geocomp continues to develop and perform enhanced seismic assessments of TVA's CCR facilities. Using our Best Applicable Practices (BAP) approach has:

- Saved TVA more than \$100 million in potential remediation and closure costs to date
- Kept their fossil plants open to provide millions of homes with economical power

The Tennessee Valley Authority is the largest public power utility in the United States. The Environmental Protection Agency (EPA) put into effect national regulations and requirements for the safe disposal of coal combustion residuals (CCR). Geocomp's advanced engineering assessments of seismic stability has helped keep these facilities open while maintaining public safety.



TVA Seismic Facility