

LANDSLIDE PREVENTION & MITIGATION

The geotechnical engineering and geologic staff of DiGioia Gray have a proud tradition of landslide mitigation services that spans over half a century. We have become the “go to” experts in landslide services over this time. We continually keep the owner’s perspective in mind and build upon our site knowledge from the initial desktop review to final deliverable. DiGioia Gray has provided landslide services for a range of market sectors spanning from Power Delivery to Oil & Gas to transportation and other commercial markets.



DiGioia Gray offers several services that separate us and make us the consultant of choice. We provide emergency site reconnaissance (typically on-site within 24-hours from initial client request) where our professional judgment tempered by experience allows us to evaluate a landslide’s potential impact to our client’s assets. This immediate evaluation will drive future activities, which may range from “do-nothing” to emergency notification. We also continually push technology and innovation, and have developed a work flow to map rock outcrops using an unmanned aerial vehicle (UAV). Data obtained from this work flow creates a three-dimensional, georeferenced, digital outcrop that we use for a kinematic rock fall hazard analysis. To date, we have used this process to analyze rock slopes up to 300 feet high in a safe and economical manner.

We believe that our staff qualifications are exceptional in landslide services. We have numerous staff members with advanced degrees and concentrations in landslide related fields, Professional Geology and Engineering licensure, and ample practical construction experience. We have published and presented numerous papers regarding landslides, but most of all, we have repeat clients that continually trust us to handle their landslides.

SERVICES

- Geological and geotechnical site reconnaissance and characterization
- Slope stability analyses (static, dynamic, rapid drawdown, staged construction)
- Soil and rock cut slope design
- Designing with geosynthetics
- Retaining / buttress structures
- Digital Terrain Models and photogrammetry of landslide sites from a UAV platform
- Three-dimensional, georeferenced, digital outcrop mapping by UAV
- Rockfall hazard analysis
- Soil / rock slope stabilization
- Geotechnical instrumentation programs
- Geotechnical peer review services
- Geotechnical construction monitoring
- Geotechnical expert witness services