## **Jim Glomb** Geotechnical and Environmental Consulting, Inc.

152 Weeks Way, Sebastopol, CA 95472 • Phone 707/237-2703, Fax 707/237-2659 www.jimglomb.com, email jim@jimglomb.com

## What is a Geotechnical Investigation and Why is the Geotechnical Consultant Important?

The purposes of a Geotechnical Investigation are to investigate the soil and geologic conditions of a property and to provide recommendations and design criteria for construction. The scope of a Geotechnical Investigation includes review of available literature; conducting on-site exploration, mapping/logging and sampling; and laboratory testing of samples obtained in the field. The collected data is analyzed and geotechnical criteria for foundations, retaining walls, site grading and site drainage are developed. This criteria chiefly consists of the load bearing capacities and anticipated lateral forces from the onsite soil and rock. The culmination of the investigation is a report summarizing the field and lab findings; conclusions regarding the geotechnical impacts of the site; and recommendations for the most geotechnically suitable construction.

In other words, the Geotechnical Consultant will define the anticipated effects of the earth on man-made features at the site as well as the impacts the development could impose on the land. The Geotechnical Consultant along with the client, builder, architect, civil engineer and structural engineer endeavor to implement the most efficient and cost effective construction methods.

The Geotechnical Investigation typically costs a few percent of the total project costs but can reduce the risk of costly problems during construction and in the future.