



GEOTECHNICAL REVIEW AND PREPARATION OF CONSTRUCTION DESIGN SPECIFICATIONS for ALARKO's Alkent Istanbul 2000, Phase 2B Istanbul, Turkey

PROJECT DESCRIPTION

Alkent Istanbul 2000 is a large residential development encompassing hundreds of home sites and commercial properties. **Earth Consultants International** was retained to conduct a geotechnical and geological review of the proposed development plans for Phase 2B of the Alkent Istanbul residential development. The development consists of a west-trending, gently sloping ridgeline that is bordered to the north and south by valleys. Safe construction of Phase 2B was impacted by multiple landslides and shallow ground water. The project was under a fast development schedule that required **Earth Consultants International** to respond quickly to design changes and construction requirements. The construction drawings were prepared in MapInfo GIS format that allowed for immediate modifications in response to plan changes.



SOLUTION

Earth Consultants International's work tasks included:

- A general review of the development plans for construction-related issues.
- Preparation of construction-level details for pile-supported and bedrock-supported crib walls, pile-supported foundations, a French drainage system, and grading and earthwork specifications.
- Laboratory testing of the soils, including direct and residual strength shear tests.

Based on our investigation, we provided the most economical, but safe, design for slope stability, dewatering, and construction specifications for the development.



Construction specifications for piles and a network of dewatering subdrains.



Subsurface geological exploration to acquire soil samples for laboratory analysis.



ECI prepared design specifications for crib walls and villa foundations.



Construction and design consultation.

