



#### EDUCATION

B.S., Civil Engineering, California Polytechnic State University, San Luis Obispo, 2004  
M.S., Civil Engineering, San Jose State University, December 2008

#### PROFESSIONAL ORGANIZATION

American Society of Civil Engineers  
American Concrete Institute  
Floodplain Management Association  
North American Society for Trenchless Technology

#### ACCOMPLISHMENTS

Geotechnical-related structure design  
Pre-fabricated bridge structures and foundations  
Geogrid-reinforced soil slopes and segmental retaining wall designs  
Preparation of plans and specifications for municipal agencies

#### REPRESENTATIVE EXPERIENCE

**Pedestrian Bridge/Park Improvements** Moraga, CA  
Lead engineer for investigation, design, permitting, and construction observations for a new 140 foot long pedestrian bridge at the Moraga Commons Park. Completed the geotechnical investigation for new bridge abutments, and alignment of new pathway linking to existing park. Geotechnical investigation included drilling of exploratory borings, laboratory testing of soil samples, and mapping of the creek banks. Design work included preparation of plans, specifications, and construction estimates. Responsibilities also included coordination of all permitting with the California Department of Fish and Game and the Regional Water Quality Control Board.

**Vasco Road Realignment** Livermore, CA  
Project engineer for geotechnical design services provided to Alameda County Public Works Agency for re-alignment of approximately 1.2 km of major roadway between eastern Alameda and Contra Costa counties. Work included design of an 11 meter tall geogrid reinforced segmental block retaining wall and several reinforced soil slopes and preparation of specifications and estimates for the geotechnical aspects of the project.

**Power Avenue and California Avenue** Pittsburg, CA  
Completed a geotechnical exploration and report for the overlay and reconstruction of portions of Power Avenue and California Avenue. Project included a subsurface exploration and recommendations for design and construction of the fast-tracked pavement rehabilitation project.

**LA Unified High School Reinforced Fill Slopes** Los Angeles, CA  
Completed design calculations and prepared plans and specifications for the construction of a 800 foot long 50 foot tall 1H:1V geogrid reinforced slope for development of a new high school in downtown Los Angeles. Project is the largest reinforced fill slope in the City of Los Angeles.

**Tunnel Road Stabilization** Oakland, CA  
Lead engineer for developing plans, specifications, and construction cost estimate to stabilize Tunnel Road after a debris flow removed the upper two to three feet of residual soil mantle on the face of the embankment supporting the roadway. A soldier pile and wood lagging retaining wall was designed as part of the stabilization project for the City of Oakland.

**Alameda Point Bay Trail** Alameda, CA  
Provided geotechnical engineering and pavement design services to the East Bay Regional Park District for development of the Alameda Point segment of the Bay Trail. Also provided geotechnical engineering assessments of existing conditions and made recommendations for pavement structural sections for the new portion of the Bay Trail between the Alameda Park and the old marina located east of the intersection of West Hornet Avenue and Ferry Point in Alameda, California.

**Bailey Road Embankment Stabilization** Pittsburg, CA  
Project engineer and lead designer for stabilizing the embankment below the north bound lane of Bailey Road adjacent to Lawlor Creek in Pittsburg, California. This was a privately funded job in cooperation with Contra Costa County. The embankment was stabilized with a steel beam and wood lagging retaining wall with tieback anchors. Due to overhead power line constraints, the cast-in-place concrete piles were constructed in two shorter pieces with a steel spiral cage in the lower portion, and the steel beam in the upper portion.

**Landfill Closure Stabilization** Jamestown, CA  
Lead design engineer for the design of a stabilization buttress and cover system for a failed portion of a closed municipal solid waste landfill. The design included a 500 foot long mechanically stabilized embankment and reinforced soil slope constructed in a steep ravine. Stability analyses needed to address global stability of the landfill and local stability of a low strength in-place clay cover. As lead design engineer, completed design analyses and prepared plans, specifications, and estimates for \$5 million reconstruction of failed landfill closure system.

**Hennessey Creek Bypass and Culvert** Fairfield, CA  
Project engineer for the investigation to develop design parameters and construction recommendations for the concrete lined channel and reinforced concrete box culvert which included geologic research, exploratory drilling, and laboratory testing. Oversaw design of portions of the reinforced concrete channel walls, a concrete drainage inlet for normal flow conditions, and a 40 foot long reinforced concrete box culvert for flood conditions.