

Greg Raymer, CEG

Senior Geologist



Education

- B.S. Geology, California State University Long Beach, 1989

Registration and Certification

- Registered Geologist, California, #6332
- Certified Engineering Geologist, California, 1997
- 40-Hour OSHA Trained, 29 CFR 1910.120(e)(2)/8 CCR 5192

Experience

24 years

With AES

10 years

Professional Activities

- Member, Geological Society of America
- South Coast Geological Society

Mr. Greg Raymer has 24 years experience as an engineering geologist in southern California. His experience includes a diversity of projects with an emphasis in landslide investigations and slope stability evaluations, fault studies and earthquake damage assessments for landfill and other public works projects. He has developed and managed site investigation programs and grading projects and managed staff in the execution of project tasks. He brings hands on experience in site geology for the FRB Landfill landslide evaluation with his current role as Field Geologist for Landslide Backcut Excavation Project and for Phase VIIA and VIIB Expansions. He supervised drilling and geologic mapping for recent preliminary investigation for NLC buttress design. He provided in-grade geologic mapping for FRB Landfill, the 26-acre expansion for Lamb Canyon Landfill, and for San Timoteo and Colton Sanitary Landfills. He also led a team of field geologists during geotechnical and construction materials investigations for \$2.3 million program for Master Plan Development for Mesquite Regional Landfill.

His relevant experience includes:

- **Frank R. Bowerman Landfill, Orange County, California**

Field Geologist for Phase VIII C Liner and West Channel Realignment and Mitigation Basin Project. Responsible for mapping and documenting geologic conditions exposed on the side slopes up to 300 feet in height and floor of the expansion area.

Field Geologist during construction of liner system for Phases VIIB of the landfill cell expansion. Responsible for mapping and documenting geologic conditions exposed on the side slopes up to 400 feet in height and floor of the expansion area.

Field Geologist during construction of liner system for Phase VIIA of the landfill cell expansion. Responsible for mapping and documenting geologic conditions exposed on the side slopes up to 146 feet in height and floor of the expansion area.

Field Geologist responsible for logging borings and documenting construction of a groundwater monitoring well and two multiple completion perimeter landfill gas probe. Prepared as-built reports for the monitoring well construction and the gas probe well construction.

- **Colton Sanitary Landfill, San Bernardino County, California**

Field Geologist responsible for implementing a field exploration program to characterize the existing final cover capping the landfill. Logged numerous test pit excavations to investigate the interim final cover thickness and prepared geologic cross sections illustrating the subsurface conditions across the landfill site.

- **San Timoteo Landfill, San Bernardino County, California**

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Field Geologist for geotechnical investigation for landfill expansion including slope stability evaluation, seismicity and faulting studies, and materials resources evaluation. Responsible for downhole logging of several bucket auger borings.

- **Mesquite Regional Landfill Master Planning, Imperial County, California**

Field Geologist responsible for logging and sampling of 19 bucket auger borings and 18 test pits in 5 clay stock piles and 51 bucket auger borings and 20 test pits within and adjacent the proposed landfill footprint and mapped the mine waste stockpiles for the material resource investigation. The investigation involved assessment of quantities and quality of materials for various uses, including concrete aggregate, LCRS sand and gravel, road base, and final cover materials.

- **Mesquite Regional Landfill Aggregate and Soil Cement Evaluations, Imperial County, California**

Field Geologist during investigations to evaluate crushed aggregate products derived from onsite alluvial sources, evaluate quality and volume of in situ and stockpiled basalt for railroad ballast, evaluate soil cement mix design for erosion protection of planned drainage channels, evaluate the depth to competent material for a cutoff wall to be constructed across a natural drainage channel. Responsible for logging of bulk sample test pits and logging of in-situ basalt and cutoff wall test pits.

- **Mesquite Regional Landfill, Final Cover Characterization, Imperial County, California**

Lead Geologist responsible for developing and coordinating a field exploration program consisting of excavation, sampling and logging of 12 test pits for a study evaluating alternative final cover systems for the side slopes and top deck of the landfill. The samples were obtained from native alluvial fan deposits occurring within the footprint of the landfill site, mine tailings dumps and ore leach pads.

- **Lamb Canyon Landfill, Riverside County, California**

Field Geologist responsible for mapping and documenting geologic conditions exposed on subgrade slopes up to 135 feet in height and floor of the Phase 2, Stage 3 expansion area during grading prior to liner system construction.

- **State Route 125, San Diego County, California**

Lead Geologist responsible for mapping of removal bottoms, cut slopes and cut areas, stability fill and buttress back cuts and keyways, bridge abutment and bent footing excavations, retaining wall footing excavations, soil nail wall cuts, and drainage structure footing excavations. Interfaced and coordinated with the Design Build Team, the Geotechnical Design Consultants, and Construction Management Team regarding routine status briefings and mitigation of unanticipated geologic/geotechnical conditions. Also responsible the preparation of as-graded maps and report documenting the geologic and geotechnical conditions encountered during grading.

- **JWPCP Tunnel and Ocean Outfall, Los Angeles County, California**

Field Geologist responsible for geologic investigation for 18-mile long tunnel including logging continuous core borings and Packer testing and preparing report for geologic and groundwater evaluations.

- **Laguna Canyon Road Realignment EIR, Orange County, California**

Performed a geotechnical feasibility review of the proposed road realignment between El Toro Road and Old Laguna Canyon Road for inclusion in an EIR. Geotechnical issues evaluated included slope stability, liquefaction, shallow groundwater, and expansive soils.

- **Newport Coast Drive Extension, Orange County, California**

Project Manger and Geologist responsible for mapping and evaluating the geotechnical/geologic conditions encountered during rough grading of the road extension from the San Joaquin Hills Transportation Corridor to Bonita Canyon Drive. Prepared a as-

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graded report with as-graded documenting the geologic and geotechnical conditions encountered during grading.

- **Shady Canyon Road Extension, Orange County, California**
Performed a preliminary geotechnical investigation of a road extension from I-5 to Bonita Canyon Road. Evaluated landslide potential and slope stability, assessed bedrock rippability and the presence of compressible and collapsible soils.
- **IRWD Zone 4 Pump Station Bridge Abutments, Orange County, California**
Performed a preliminary geotechnical investigation for the bridge abutments at Bonita Canyon Drive. Evaluated compressible and collapsible soils, expansive soils and stream bank erosion potential.
- **East Valley Water District Plant 37, San Bernardino County, California**
Performed a geotechnical investigation for a 4-million gallon water reservoir, booster pump station, pressure reducing station, isolation valve and observation vaults and pipeline all located between the north and south branches of the San Andreas fault zone. Geotechnical issues evaluated included fault rupture, ground shaking, landslide and slope stability, bedrock rippability and compressible and collapsible soils.
- **La Bond Ranch Development Phase II, Chino Hills, California**
Staff Geologist responsible for mapping cut slopes up to 250 feet in height and cut areas, removal bottoms, and stability fill and buttress back cuts up to 300 feet in height and keyways up to 200 feet wide, 700 feet long, and 20 feet deep, and verification of subdrain construction. Prepared a as-graded report with as-graded documenting the geologic and geotechnical conditions encountered during grading.
- **Winchester Commercial and Park Sites Development Phases I and II, Riverside, California**
Performed a preliminary geotechnical investigation and evaluated geotechnical conditions impacting site development including rippability, liquefaction, shallow groundwater and compressible soils.
- **Audie Murphy Ranch Development, Canyon Lake, Riverside County, California**
Prepared geotechnical section of the Specific Plan/EIR for the 1,159-acre site. Evaluated liquefaction potential, shallow groundwater, compressible/collapsible soils and rippability.
- **Fault Investigation, Rancho Cucamonga, San Bernardino, California**
Performed geotechnical and fault investigations for an 11-acre site located at the base of the San Gabriel Mountains. A portion of the site is located within an Alquist-Priolo Earthquake Fault Zone. Major geotechnical issues evaluated included fault rupture, strong ground shaking and stream bluff stability.
- **Fault Investigation, Lake Elsinore, Riverside County, California**
Performed a fault investigation for a 712-acre property located at the south end of Lake Elsinore. Subsurface investigations conducted included multiple geophysical methods and trench exploration of the Glen Ivy North and Sedco faults.
- **Shady Canyon Residential Development, Orange County, California**
Performed preliminary geotechnical investigation during planning and design of the 500-acre development. Evaluated landslide potential, rippability of bedrock, faulting potential and the presence of compressible and collapsible soils.
- **Las Cruces Landslide, Laguna Niguel, Orange County, California**
Performed a geotechnical investigation of a slope failure and developed stabilization measures consisting of 27 caissons and a stability fill slope.