



Ronald J. Tanenbaum, PhD, CVS, PE, GE
Director

Qualifications

Dr. Tanenbaum has over 40 years of experience in applying earth material mechanics and geology to solving engineering, construction, water resources, mining, urban, environmental, and solid waste issues.

Dr. Tanenbaum, a member of SAVE International (the value engineering society) is currently serving as Vice President of the San Diego Section. He has formal training (Module I and Module II) in the practice of value engineering, and is certified by SAVE as a Certified Value Specialist

Education

Ph.D, Geotechnical Engineering, Texas A&M University, 1975
M.S., Geological Engineering, University of Arizona, 1972
B.S., Geological Engineering, University of Arizona, 1969
A.A.S. Mathematics, Rochester Institute of Technology, 1966

Registrations

Professional Geotechnical Engineer, California, No. 2343
Professional Engineer, California, No. C049780
Professional Engineer, Nevada, No. 9532
Professional Engineer, Texas (Inactive), No. 70556
Professional Engineer, New Hampshire, No. 6069
Professional Engineer, Arizona, No. 14283
Professional Engineer, Pennsylvania (Inactive), No. 027263-E
Certified Value Specialist, SAVE International, 2003

Professional Affiliations

SAVE International - Vice President of the San Diego Chapter
American Society of Civil Engineers – Past President of the San Diego Section
American Public Works Association

Representative Experience

Dr. Tanenbaum is a Certified Value Specialist and has formal training (Module I and Module II) in the practice of value engineering. He has served as the geotechnical engineering specialist, civil engineer, and VE team leader, as well as Assistant Team Leader in numerous relevant value engineering studies for the following agencies:

- ◆ Municipal Water District of Southern California
- ◆ Eastern Municipal Water district
- ◆ Inland Empire Utility Agency
- ◆ Los Angeles Department of Water and Power
- ◆ City of San Diego Metropolitan Wastewater District
- ◆ U.S. Army Corps of Engineers, New Orleans, Omaha, Fort Worth, Portland, Louisville and Alaska Districts
- ◆ Southwest Division, Naval Facilities Engineering Command
- ◆ California Department of Transportation
- ◆ Port of San Diego
- ◆ Silicon Valley Transportation Authority
- ◆ Guam Department of Public Works

VALUE ANALYSIS/VALUE ENGINEERING PROJECT STUDIES

WATER AND WASTEWATER TREATMENT PLANT AND ENVIRONMENTAL FACILITIES PROJECTS

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| <i>Metropolitan Water District of Southern California</i> | <ul style="list-style-type: none">◆ Wadsworth Pump Plant Controls◆ Diamond Valley East Dam Marina Utility Study◆ Robert B. Diemer Washwater Reclamation Plant No. 3◆ Second Lower Cross Feeder Pipeline Project◆ F.E. Weymouth Structural Integrity VE - Headhouse & Administration Buildings, & Filter Basins/Buildings 1 & 2◆ Jensen Water Treatment Plant Solids Handling Facility◆ Jensen Water Treatment Plant Entrance Security Facilities◆ F.E. Weymouth New Plant & Administration Buildings◆ Weymouth WTP Power System Upgrade◆ Chemical Tank Farm Phase I, Diemer Oxidation Retrofit Program◆ Lake Skinner Treatment Plant Solar Power Generation◆ Copper Basin & Gene Wash Dams Rehabilitation Projects◆ Robert B. Diemer Water Treatment Plant North Access Road Project◆ Yorba Linda Power Plant Modifications◆ Hayfield Groundwater Extraction Project◆ Perris Valley South Reach |
| <i>Miscellaneous Water and Wastewater Districts</i> | <ul style="list-style-type: none">◆ South Mission Valley Trunk Sewer Replacement, San Diego Metropolitan Wastewater District◆ Western Way Pump Station, Eastern Municipal Water District◆ Perris II Desalination Facility, Eastern Municipal Water District◆ Sun City Force Main and Recycled Water Pipeline EMWD◆ LA Reservoir Water Quality improvement Project, Los Angeles Department of Water and Power◆ Reclamation Plant 1 Dewatering Facility, Inland Empire Utility Agency |
| <i>U.S. Army Corps of Engineers, Omaha, Fort Worth, Portland, Alaska, Louisville, and Memphis Districts</i> | <ul style="list-style-type: none">◆ Flood Control for Watertown and Vicinity, South Dakota◆ Lower Yellowstone River Irrigation Diversion Dam, Fish Protection and Passage, Montana◆ Missouri River Recovery Project – Emergent Sandbar Habitat Restoration, Nebraska◆ Missouri River Recovery Project – Shallow Water Habitat Restoration, Nebraska and Missouri◆ Middle Logan Creek Flood Control, Randolph, Nebraska◆ Cibola Creek Watershed Improvements, San Antonio, TX◆ Navigation Lock Repair, John Day Lock and Dam, Columbia River, OR◆ Ft. Stevenson Marina and Launch Ramps, Garrison Dam, ND◆ Sand Creek Watershed Environmental Restoration, Nebraska◆ Relocation of Screaming Eagle Blvd, Ft. Campbell, KY◆ Mill Creek Section 3 Restoration Project, Cincinnati, OH◆ Deign Charrette for Replacement Housing, Ft. Richardson, AK◆ Alert Holding Area and Pallet Processing Facility, Ft. Wainwright, AK◆ Grand Prairie Secondary Distribution System, Grand Prairie, AR |

**U.S. Army Corps of
Engineers, New Orleans
District**

- ◆ New Orleans District Dredging Program and Projects
- ◆ Baptiste Collette Navigation Channel widening
- ◆ Louisiana Coastal Area - Terrebonne Bay Shoreline Protection
- ◆ Louisiana Coastal Area – White Ditch Freshwater Diversion
- ◆ Mississippi River Gulf Outlet Ecological Restoration
- ◆ Category 5 Hurricane Protection for Southern Louisiana
- ◆ Stormproofing St. Bernard and Plaquemines Parishes Pump Stations
- ◆ Empire Lock and Floodgate Repairs, Empire, Louisiana
- ◆ Lake Ponchartrain West Return Floodwall Improvements
- ◆ Alexandria to the Gulf of Mexico Flood Control Feasibility Study
- ◆ Beneficial Use of Dredged Material
- ◆ Plaquemines Parish Levee Improvements
- ◆ Armoring Methods for Levees
- ◆ New Orleans Outfall Canal Pump Stations (17th Street, Orleans and Florida Canals)
- ◆ Metropolitan New Orleans & Vicinity 100-Year Hurricane Protection Plan
- ◆ East Orleans Parish Levee Study
- ◆ St. Charles Parish Urban Flood Control Study
- ◆ Alternative Industrial Water Supplies, East Baton Rouge Parish
- ◆ After Action Report for Hurricanes Katrina and Rita
- ◆ Lily Bayou Outlet Works for the Comite River Diversion Project
- ◆ Lily Bayou Weir Structure for the Comite River Diversion Project
- ◆ Grand Isle Shoreline Restoration
- ◆ Morganza to the Gulf Levee and Flood Control Structures
- ◆ Life Cycle Costs for Construction, Operation & Maintenance of Lock Gate Structures
- ◆ SELA Algiers Subbasin Flood Reduction Study
- ◆ Fluff and Fluid Mud Control, Atchafalaya Bar Channel
- ◆ Donaldson to the Gulf Levee, Lock & Dam, Pump Stations, and Flood Control Structures
- ◆ Barataria Basin Barrier Island Restoration Feasibility Study
- ◆ St. Bernard Parish Flood Control
- ◆ Southern Louisiana 2030 Coastal Restoration of Barrier Islands
- ◆ Houma Navigation Lock & Dam, Floodgate and Canal Structures
- ◆ Lower Atchafalaya Basin Flood Design
- ◆ Comite River Diversion Project
- ◆ Swift & Canal 'A', Woodmere, Sunnymeade, and Pipeline Canals
- ◆ Dewatering Specifications During Canal Construction
- ◆ Mississippi River Gulf Outlet Ecological Restoration Plan
- ◆ Permanent Outfall Protection
- ◆ Southwest Coastal Louisiana- Feasibility Phase
- ◆ Greater New Orleans Area Hurricane and Storm Damage Risk Reduction Mitigation Plan (HPS-5)

National Park Service

- ◆ Jim Camp Bridge Replacement/Rehabilitation, Petrified National Forest, Choosing by Advantages Study

**Various Clients &
Projects**

- ◆ Ordot Dump Closure, Guam
- ◆ Layon Municipal Sanitary Landfill, Dandan, Guam



HIGHWAY AND TRANSIT PROJECTS

California Department of Transportation

- ◆ SR 74/I-15 Interchange in the City of Lake Elsinore
- ◆ L.A. to Fullerton Triple Track and Grade Separations
- ◆ Risk Management Studies, Caltrans District 8
- ◆ Widen US 395 to Four Lanes with Continuous Two-Way Left-Turn Lane
- ◆ Riverside Avenue Overcrossing of I-10
- ◆ SR 40 Pavement Rehabilitation
- ◆ InyoKern 4-Lane Expansion of SR 395
- ◆ Upgrade Metal Beam Barrier to Concrete Barrier
- ◆ SR 18 Realignment
- ◆ Kings Canyon Expressway, Segments 1 and 2
- ◆ SR 87 South HOV Lane
- ◆ SR 29 Highway Grade Separation
- ◆ SR 4 Gap Closure
- ◆ SR 138 Highway Realignment
- ◆ SR 5/Western Avenue Interchange
- ◆ 1st Street Viaduct Widening over LA River
- ◆ River Road Bridge
- ◆ I-15/Limonite Avenue
- ◆ Reconstruct I-15 Interchanges at D Street, E Street, & Stoddard Wells Road
- ◆ Redlands & Yucaipa
- ◆ Reconstruct Limonite Road IC & Add New I/C at Schleisman Road
- ◆ Van Buren Blvd Bridge Replacement I-215 & Scott Road
- ◆ I-15 Pavement Rehabilitation from Ontario Ave to Glen Ivy
- ◆ Reconstruct & Widen Ramps at La Sierra Avenue
- ◆ I-215 University Parkway Interchange
- ◆ Riverside Avenue Grade Separation
- ◆ Iowa Avenue Grade Separation
- ◆ SR 57 Northbound Improvement Project
- ◆ I-15 Mira Mesa/Scripps Ranch Direct Access Ramp - D 11

Santa Clara Valley Transportation Authority San Jose, California

- ◆ Silicon Valley Rapid Transit Project, Line Segment Phase II
- ◆ Silicon Valley Rapid Transit Project, Line Segment Phase I
- ◆ Centralized Equipment and Maintenance Facility, Caltrans

Various Clients & Projects

- ◆ Escondido to Oceanside Light Rail System, North County Transit District
- ◆ 10th Avenue Marine Terminal Pavement Rehabilitation, Port of San Diego
- ◆ Mission Valley East Light Rail Transit, San Diego Metropolitan Transit Development Board



FACILITIES

**U. S. Army Engineer
District, Alaska
Functional Analysis
Concept Development
(FACD)**

- ◆ Family Housing Replacement, Elmendorf Air Force Base, AK
- ◆ Cibolo Creek Ft Worth District, San Antonio, TX

**Southwest Division,
Naval Facilities
Engineering Command**

- ◆ Los Angeles Air Force Base, Consolidated Base Support Structure

Municipal Facilities

- ◆ GRVC Dormitory Addition and Core Upgrade, Rikers Island, NY

RELEVANT WATER RESOURCES ENGINEERING PROJECTS (DAMS, PIPELINES, PUMP STATIONS, RESERVOIRS, TREATMENT PLANTS)

Dams and Reservoirs

- ◆ Inspection of Sweetwater Dam, Chula Vista, California
- ◆ Repair of Three Earth Dams, Marine Corps Air Station Miramar, CA
- ◆ White Tanks Flood Retention Structure #3, Maricopa County Flood Control District, AZ
- ◆ Fly Ash Pond Dam Repairs, Cholla Power Plant, AZ
- ◆ Olivenhain Dam and Appurtenant Structures, San Diego County, CA
- ◆ Grouting for Seepage Cutoff in Galleries, Dworshak Dam, Orofino, Idaho
- ◆ Instrumentation Assessment and Safety improvements, Sweetwater Dam, Chula Vista, CA
- ◆ Outlet Works Rehabilitation, Lower Otay Dam, San Diego, CA
- ◆ Inspection of Earth and Concrete Dams in Ohio and West Virginia for the U.S. Army Corps of Engineers
- ◆ Repair of Excessive Seepage through Two Earth Dams, Dubois, PA
- ◆ Instrumentation of Coal Mine Refuse Dams in Pennsylvania and West Virginia
- ◆ LA Reservoir Water Quality Improvement Project

**Pipelines, Tanks,
Treatment Plants, etc.**

- ◆ Geotechnical Investigations for Water Pipelines and Sewer Lines, City of San Diego, CA
- ◆ Investigation of Point Loma Sewer Outfall Failure, San Diego, CA
- ◆ Buena Vista Pump Station, Otay Water District, CA
- ◆ Geotechnical Investigation, South Bay Water Treatment Plant, City of San Diego, CA
- ◆ Geotechnical Investigation, Mission Gorge Reclamation Treatment Plant, City of San Diego, CA
- ◆ Dike and Evaporation Pond Design, Salton Sea, Imperial County, CA
- ◆ Santa Fe Seasonal Storage Reservoir, Vallecitos Water District, CA
- ◆ San Marcos Creek Channelization and Development, San Marcos, CA
- ◆ Terminal Structure and Escondido 4 Flow control Facility Takeoff Structures, San Diego County Water Authority
- ◆ Rancho Jamul (1580-2) 0.5 mg Reservoir, Otay Water District, Jamul, CA
- ◆ East Lake Greens 30 MG Reservoir, Otay Water District
- ◆ Elks Lodge pipeline, Otay Water District, Chula Vista, CA
- ◆ Relocate 12-inch-Diameter Water Main Around the Rosecrans Landslide, U.S. Navy Subbase, Point Loma, CA



- ◆ Seismic Stability of Aboveground Water Reservoir/Tanks, Sweetwater District, Chula Vista, CA
- ◆ Underground Concrete Water Reservoirs, Large Earth Fills, Pump Stations, Ancillary Piping, and Access Road, Otay Water District, Spring Valley, CA
- ◆ Proposed Water Treatment Plant in the Anasconda River, Washington, DC
- ◆ Yorba Linda Power Plant Modifications
- ◆ Storm Proofing Pump Stations, St Bernard & Plaquemines Parishes, Louisiana
- ◆ EMWD Western Way Pump Station
- ◆ EMWD Perris II Desalination Facility
- ◆ IEUA RP-1 Solids Handling Facility
- ◆ New Orleans Outfall Canal Pump Stations