



Michael Reid, P.E.

Education: Auburn University, Auburn, Alabama MSCE, 2000
University of South Alabama, Mobile, Alabama BSCE, 1987

Certifications: Professional Engineer Licensed in the following States:
Alabama, Mississippi, Florida, Texas
USDOE RAM-W Licensed to provide Security Evaluations for Water Treatment Plants
Hazardous Waste Operator - OSHA 40 CRF1910.120 certified

Professional Associations:
Member, Society of American Military Engineers (SAME)
Member, Northwest Florida League of Cities
Member, Toastmasters International
Member, Auburn University Alumni Association
Member, University of South Alabama Alumni Association

Firm Experience: **Florida Manager**
Driven Engineering, Inc., Niceville, Florida
May 2011 to present
Civil and environmental design engineer and Florida Manager for the firm. Supports home office, works on various projects in the Northwest Florida area.

Senior Project Manager
PBS&J
October 2007-Feb 2011
Civil engineering site design, utilities, elevated water storage tanks, lift stations, water booster stations, retention/detention ponds, etc.

Regional Vice President
Baskerville-Donovan Inc. (BDI)
May 2005 to September 2007
Civil engineering of site plans, water/wastewater, utilities, permitting, V-Zone studies, pier permitting, and business development in the region for the company.

President
Reid, Still & Associates, Inc. (RSA)
September 2000 to April 2005
Civil engineering design of site plans, utilities design, subdivisions, county projects, management of staff and business development in the region for the company.

Senior Project Manager
Delta Research Corporation (Now part of L3 Communications)
May 1991 to September 2000
Environmental Engineering support to the USAF and other federal agencies. Environmental computer software development and management of engineers and computer programmers.

Staff Engineer
BCM Engineers
1987-1991
Provided a variety of services to private clients including CERCLA/RCRA services. Cost Estimating, Scheduling, program management, etc.

Mr. Reid is competent in many engineering fields including:

- Environmental Engineering
- Civil Engineering
- Permitting
- Water Quality
- Radioactive and Chemical Transport
- Traffic & Transportation Safety
- Utilities and Infrastructure Design
- Design and Planning of Recreational Facilities
- Computer Modeling
- Statistical Analysis
- Scheduling
- Economic Analysis

Environmental – Water/Wastewater

Panama City- Bay County International Airport, Bay County, Florida. Mr. Reid provided QA/QC review, cost estimating, preliminary design report (PDR), and was the engineer-of-record for the design of water and sewer utilities for the airport terminal and adjoining tenants for the Panama City Airport Authority (PCAA). Design and review included: potable water booster station, concrete ground storage tanks, sewage lift stations, buried PVC and ductile iron distribution piping, lighting, wastewater treatment plant, FDEP and County permitting, and stormwater design

City of Pascagoula, MS Design of four (4) CDBG projects in the City, S-30, S-33, W-25, W-27 River Park and Beach Boulevard Water and Sewer Lines. Included the design of several lift stations, several miles of water and sewer lines, and the crossing of the Pascagoula River with a water line.

Hancock County, MS W-3 CBDG projects. This project included over 2 miles of 12" diameter water line, a 250,000 gallon elevated storage tank and an elevated well head with 1000 gpm pump and 10" well casing 2000 foot deep.

Harrison County, MS W-18 CBDG projects. This project included the design of over 17 miles of 14" diameter water line, 6 elevated tanks and 6 potable groundwater wells. Permitting to the MDOT, MDEQ, and MSDOH were provided as part of the services.

Ft. Rucker Army Post - Lake Tholocco Master Plan Upgrade. This project included updating the existing development plan and evaluation of existing utilities at six (6) facilities around the Lake.

Hurlburt Field AFS, Lift Station No. 1 Evaluation for Additional Building Tie-in, Squad Ops, Fuel System Maintenance Building. Evaluated existing and proposed sewer flows to ensure lift station was sized large enough for additional flow to be tied into the lift station.

Pensacola Downtown Tech Park Utilities Design, (9th Avenue and Chase Streets). Design engineer for an 8-acre development of multi-story buildings on Salamanca Street. Design included evaluation of multi-story buildings for Fire Protection, and Sanitary Sewer Design to tie-into current system. Water CAD was used to layout lines and pressure gradients.

El Centro/Bahamas Reuse, Panama City Beach, Florida. Principal-in-charge responsible for quality assurance, client representation, and management of design team. This reuse/reclaimed water project was funded by a \$19 million grant from the Florida Dept of Environmental Protection (FDEP) to Panama City. The project consisted of 70,000 linear feet of reclaimed water line design and construction in several beachfront communities. It also included removal and replacement of existing roadbed and construction of new water lines and sewer lines to minimize the number of septic tanks in this sensitive beach environment.

Downtown Utilities Infrastructure, Panama City, Florida. Principal-in-charge for the expansion of the City of Panama City's water and sewer system in the greater downtown area. The project was designed in two phases, and included permitting and design of buried utilities using directional drilling techniques under existing city streets and sidewalks. The \$6 million construction project included permitting across railroad trestles, wetlands, and other sensitive environment.

Rabbit Creek Subdivision (100 Lots), Theodore, Alabama. Engineer-of-record responsible for all facets of the design and permitting for this large subdivision in south Mobile County. This project for Riverwood, LLC included the design of water distribution and city sewer pumps for each lot. The property was low-lying and sewer had to be tied into an 18-inch high pressure sewer line approximately 1-mile from the site. Sanitary sewer modeling was provided as part of the grinder pump network.

Pier Park West, Panama City Beach, Florida. Engineer-of-record responsible for designing a 100,000-square-foot shopping center civil layout in the prestigious Pier Park development in Panama City Beach. This project for Simon Properties, Inc, included design of a 100-gallons-per-minute (gpm) lift station to deliver the site wastewater system into the city's main pressure line on Highway 98. The project included 400 parking spaces, water, sewer, and stormwater piping layout.

City of Bonifay Elevated Water Tank, Bonifay, Florida. Principal-in-charge responsible for recommending corrective action strategies for minimizing pressure differentials in the elevated tank system for the City of Bonifay. Work included attending city council meetings and developing strategies for restoring the tank system to required pressure ratings using pressure control valves at the existing tank.

City of Bonifay Municipal Water Well and Building, Bonifay, Florida. Principal-in-charge responsible for assisting the City of Bonifay with developing strategies to alleviate problems associated with the infiltration of sand particulate, iron, and sulfate in the wellhead. Provided oversight support by assisting the City in recommending methods of sulfate removal via gas chlorination, centrifugation of sand particulate, and addition of a sequestering agent to eliminate iron problems.

Ciba-Geigy Chemical Company Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Site, McIntosh, Alabama. Scheduler/cost estimator/on-site civil engineer for a \$40 million wastewater plant dismantlement, pesticide remediation, and hazardous waste land vault construction project regulated by the Alabama Department of Environmental Management (DEM) and U.S. Environmental Protection Agency (USEPA) Region IV (Atlanta). The project was a pesticide remediation site regulated under the auspices of the U.S. Superfund (CERCLA) statutory requirements. As the main project controls engineer, he was responsible for managing contractors to ensure the existing wastewater plant was decommissioned and the waste from numerous dumpsites and wastewater holding pond residues were stabilized and permanently disposed of in the on-site hazardous waste land vault. A new wastewater treatment plant was constructed on the property to service ongoing operations.

U.S. Department of Energy, Uranium Mill Tailings Cleanup, Idaho Falls, Idaho. Mr. Reid was responsible for developing an automated computer program to estimate the removal, packaging, transportation, and ultimate disposal cost of uranium-contaminated soils. The program estimated the cost within 1% of the proposed budget for a Department of Energy (DOE) site out west.

Ports

Panama City Port Authority Master Plan, Panama City, Florida. As a senior engineer, Mr. Reid has been responsible for client coordination, and update of the Master Plan. This project is an assignment under the Panama City Port Authority General Engineering Consulting (GEC) Services master contract and involves updating the master plan to include the recent building additions, proposed dockage, new utilities, stormwater system, and road construction. The port has expanded over the last couple of years, and in doing so, they must update their master plan to provide updates to their Board and to the City of Panama City.

Port Eppes Riverport, Eppes, Alabama. Mr. Reid was responsible for providing conceptual design and drawings for a riverport on the Tombigbee waterway. The design for the county commission included: rail spurs, access roads, utilities, berthing/docking facilities, and port office facilities for cargo handling and distribution.

Port of Panama City Master Drainage Design, Panama City, Florida. Mr. Reid was responsible for designing a drainage collection and treatment system for a 75-acre tract of land for the Port of Panama City. The drainage system included a concrete settling basin; 64-inch reinforced concrete arch pipe (RCAP); large concrete smart/connection boxes to redirect water; 60-inch RCP discharge piping; grass drainage swales; grate inlets; a 1-acre retention pond; and many road crossings, connections, and headwalls. The design had to accommodate large cranes and heavy equipment. Construction was limited to certain times of the day when cargo was not being handled.

Dredge/Spoil Site Design for the Port of Panama City and the Naval Support Activity (NSA) Complex, Bay County, Florida. Mr. Reid was responsible for designing a dredge spoil area for the U.S. Navy as part of an agreement between the Port of Panama City and NSA-Panama City to accommodate spoil material for future dredging in the harbor. Mr. Reid coordinated geotechnical investigations to determine the proper slope stability and berm height of the spoil area. Outlet control and infiltration analysis determined the outlet and bottom/side slopes materials.

Charleston NAS Dredging and Closure, Charleston, South Carolina. Mr. Reid was responsible for providing environmental support in the review of dredging logs and contamination assessment of heavy metals and other toxins from sand blasting and painting operations at the Navy Base Berths. In addition to the cost component, he provided engineering judgments/advice on Naval facility modifications/upgrades.

U.S. Navy "Tiger" Team (Value Engineering) Team Member, Charleston, South Carolina. Mr. Reid was a "Tiger" team member responsible for supporting the Navy's Southern Division in Charleston and the Naval Facilities Engineering Services Center (NAVFESC) in Port Hueneme, California. Services included providing value engineering analysis for many Naval facilities in the continental U.S. and Hawaii. As the cost expert for the team, he provided detailed economic evaluations and environmental cleanup and associated construction cost analysis as part of the value engineering team.

U.S. Army M1A1 Tank Road Crossing and Beach Landing Facilities, northwest Florida. Mr. Reid was engineer-of-record under contract to Peterson Engineering, Pensacola, Florida for the design of two training locations in northwest Florida for the U.S. Marines and U.S. Army. Design included asphalt road modifications to handle 70-ton tanks, and beach landing areas to minimize damage to sensitive environments.

18-Slip Marina on Dog River, Alabama. Mr. Reid was the engineer-of-record for an 18-unit private boat slip marina on Dog River. Design included the layout of slips, creosote circular pile configuration, cross bracing, and deck attachment details. A wetlands delineation was performed on the adjacent land area along with USACE dredge and fill permits.

In addition to these projects, Mr. Reid has designed and permitted many roads and utility systems in Alabama and Florida that met Alabama Department of Transportation (ALDOT), Florida Department of Transportation (FDOT), Alabama Department of Environmental Management (ADEM), FDEP, Railroad, and county and city regulatory requirements.

NEPA support

State Road 87 Environmental Assessment (EA) Support, Eglin AFB, Endangered Species, Gulf Sturgeon and other endangered clams survey, Yellow River, Okaloosa County.

Environmental – CERCLA/RCRA – Hazardous Waste, Landfills, Permitting

Ciba-Geigy Chemical Company Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Site, McIntosh, Alabama. Scheduler/cost estimator/on-site civil engineer for a \$40 million wastewater plant dismantlement, pesticide remediation, and hazardous waste land vault construction project regulated by the Alabama Department of Environmental Management (ADEM) and U.S. Environmental Protection Agency (USEPA) Region IV (Atlanta). The project was a pesticide remediation site regulated under the auspices of the U.S. Superfund (CERCLA) statutory requirements. As the main project controls engineer, he was responsible for managing contractors to ensure the existing wastewater plant was decommissioned, and the waste from numerous dumpsites and wastewater holding pond residues were stabilized and permanently disposed of in the on-site hazardous waste land vault. A new wastewater treatment plant was constructed on the property to service ongoing operations.

Baker, Florida Solid Waste Landfill. Under contract to the city of Baker, Florida, Mr. Reid designed the Baker Florida Solid Waste Landfill, which met RCRA Subtitle "D" requirements. This included design of leachate collection system, bottom liner support system, gas venting system, geotextiles, and HDPE liners, and daily cover requirements.

Wright Landfill Cell Closure, Fort Walton Beach, FL. Under contract to the city of Fort Walton Beach, Mr. Reid inspected the cell closure at the Wright Landfill. Part of the duties included keeping daily logs and provided quality assurance that the cover liner was installed correctly.

McMillan-Bloedel Paper Plant Wood Chip Landfill Evaluation, Pine Hill, Alabama. Under contract to McMillan-Bloedel, Mr. Reid evaluated life expectancy of the operational woodchip landfill and provided projections on closure dates and alternative landfill construction options.

Montgomery, Alabama Landfill – City of Montgomery, Alabama. Design of new landfill cells on top of existing cells to expand use of existing landfill space on the same property.

Alabama Solid Waste Management Plan – Montgomery, Alabama. Under contract to ADEM, Mr. Reid was part of the engineering team that conducted a study of the state of practice for solid waste collection, handling, transportation and disposal in the State of Alabama. Mr. Reid provided research on the state of trash collection, transfer, recycling, and disposal for the entire State of Alabama.

Industrial Plant POL Cleanup Plan/Design, Metairie, LA. Under contract with a local oil refinery, Mr. Reid designed a cleanup plan for a petroleum spill at an industrial facility near a rail line. Coordination with the rail line management company was required due to crews working in and around railroad beds and trestles. The cleanup plan met LDEQ and local county requirements and included a sampling regime to verify that the waste was removed and that the bottom bed was clean and met LDEQ cleanup standards. A full set of plans and specifications were provided to the client.

Transamerican Refinery Inc. (TRI) permitting and retention pond design/evaluation – Laplace, Louisiana. As a consulting engineer, Mr. Reid supported various petro-chemical companies on stormwater permitting to meet the TCLP requirements from their discharge ponds. Mr. Reid conducted site visits and counseled clients on permitting issues. The TRI project included capturing stormwater from an industrial site in a retention pond where water was treated prior to discharge.

Phase I Site Assessments Support, Louisiana. Under contract to various small businesses, Mr. Reid provided Phase I site assessment services. The service included a site walkthrough, review of MSDS sheets, review of plant operating procedures, and recommendations on corrective actions. Additional review included research on surrounding properties, wetlands, drinking water wells, etc.

General Civil Design – Water, Sewer, Roads, Stormwater, Permitting

Florida Landings Development, Washington County, Florida. As a senior engineer responsible for support on the development of regional impact (DRI), Mr. Reid has provided input on site investigation and planning for the future development. This project for Florida Landings involves planning and design services for the development of a 1,883-acre tract in Washington County. The project will involve a mixed-use development of approximately 3,500 units with a mix of residential housing styles at a mix of price points, 85,000 square feet of support retail development, and an 18-hole golf course. Services being provided include project management for the DRI, master planning, environmental assessments of wetlands and wildlife, civil engineering, transportation planning, utility planning, and golf course design.

Waterstone Mixed-Use Development, Madison, Alabama. Mr. Reid was responsible for project management and senior design lead for the PBS&J team that provided the design of the new 4-lane with landscaped center island Royal Drive extension and access roads and utilities design within the 400-acre parcel. This project for Madison Town Center, LLC involves master planning, design, engineering, and permitting services for the infrastructure development for the proposed Madison Town Center development.

Energy Demonstration Fitness Center at Tyndall Air Force Base, Tyndall Air Force Base, Alabama. Mr. Reid is responsible for quality assurance and schedule development for the design team. This project for the U.S. Army Corps of Engineers (USACE), Mobile District involves providing full architectural services for this high visibility showcase energy/sustainable development project that will be used to highlight the Air Force's success in the areas of energy and sustainable development. We are working with Tyndall AFB and the USACE, Mobile District to design a new 82,478-square-foot fitness center. Featuring alternative sources of energy and "green-build" design principles, the fitness center was designed to achieve the Leadership in Energy and Environmental (LEED) "silver" rating, with a goal of "gold".

Beach Blvd, Pascagoula, MS. Under contract to the City of Pascagoula, MS., Mr. Reid designed road intersections, drew plan and profiles, and conducted route surveys in the field in conjunction with design drawings for a 2-lane highway through town called Beach Boulevard. The project included adding a concrete handrail on the adjoining seawall, milling the top surface and replacing the surface course with new asphalt.

FEMA Flood Studies. Under contract to FEMA, Mr. Reid provided support by gathering data and running the USACE HEC-2 Computer Model for FEMA flood Studies on rivers and tributaries in Mississippi and Tennessee.

Port of Panama City Master Drainage Design, Panama City, Florida. Mr. Reid was responsible for designing a drainage collection and treatment system for a 75-acre tract of land for the Port of Panama City. The drainage system included a concrete settling basin; 64-inch reinforced concrete arch pipe (RCAP); large concrete smart/connection boxes to redirect water; 60-inch RCP discharge piping; grass drainage swales; grate inlets; a 1-acre retention pond; and many road crossings, connections, and headwalls. The design had to accommodate large cranes and heavy equipment. Construction was limited to certain times of the day when cargo was not being handled.

Baldwin Subdivision, Satsuma, AL – a 20-lot cul-de-sac subdivision. Under contract to Southern Homes, LLC., Mr. Reid signed and sealed a full set of construction plans including: stormwater, utilities plans, roads, and all permits. The project was built in 2003.

Radcliff Subdivison, Saraland, AL – a 12-lot cul-de-sac subdivision Under contract to Southern Homes, LLC., Mr. Reid signed and sealed a full set of construction plans including: stormwater, utilities plans, roads, and all permits. Work also included filing septic tank permit applications with the Mobile County Health Department. The septic tank usage was approved by the Health Department. The project was built in 2005.

Theodore Sidewalk Project, Theodore, AL. Under contract to the Mobile County Engineering Department, Mr. Reid was the Engineer-of-Record for the 2.5 miles of concrete sidewalk design which met Mobile County, ALDOT, and ADA requirements. The design plans included plan and profile, details, fencing, handrails, and all ADA bumpers and other appurtenances. The project was built ahead of schedule and under budget in 2004. The County was happy with the end product.

Wilmer Recreational Park Upgrades, Wilmer, AL. Under contract to the Mobile County Engineering Department, Mr. Reid was the engineer-of-record for addition of fencing, two (2) pavilions, and stormwater improvements. The design plans included detailed drawings on the pavilion and foundations slab including plan view and elevation views, bolt connections, and foundation connection, details, fencing, handrails, and all ADA bumpers and other appurtenances. The project was built ahead of schedule and under budget in 2004. The County was happy with the end product.

Rabbit Creek Subdivision (100 Lots), Theodore, Alabama. Engineer-of-record responsible for all facets of the design and permitting for this large subdivision in south Mobile County. This project for Riverwood, LLC included the design of water distribution and city sewer using grinder pumps for each lot. The property was low-lying and sewer had to be tied into an 18-inch high pressure sewer line approximately 1 mile from the site. Sanitary sewer modeling was provided as part of the grinder pump network. The design also included plans and specifications for roads, drainage, and utilities.

Magnolia Bay Club (multi-use property, 69 residential lots and two 99-unit condominiums) located in Bay County, FL. Under contract to Taylor Woodrow, Mr. Reid was the engineer-of-record on the project, and signed and sealed a set of construction plans for the project including stormwater, utilities plans, access roads, covered parking spaces, turn lanes, lift station, and FDOT/FDEP/PCB permits.

Blackstone Country Club (130-lot residential community and Golf Course) in Walton County. Under contract to G&G LLC, Mr. Reid signed and sealed a set of construction plans after he took over the design from another engineer that started the project. Modifications to the original plans included road alignment changes, and drainage modifications. The plans were resubmitted to Walton County/FDEP, and have been approved for construction. The design included a full set of stormwater, utilities plans, roads, turn lanes, lift station, and FDOT/FDEP/PCB permits.

Design Center of the Emerald Coast (4 multi-story buildings with parking on Hwy 98 in Walton County). Under contract to a private developer Mr. Reid designed the parking, stormwater and utilities for this proposed major development on Hwy 98 in a wetlands environment. The owner mitigated wetlands by providing wetlands credits and purchasing other wetlands in the county for permanent conservation.

PCB Commerce Park Multi-Office Complex Development (2-20,000 SF warehouses located on a tight 5-acre industrial site). Under contract to Dooley-Mack Contractors, Mr. Reid was the engineer-of-record for the project and signed and sealed a full set of construction plans including: stormwater, utilities plans, parking, roads, turn lanes, lift station, and FDOT/FDEP/PCB permits. The project is under construction, and the client has been very happy with the design. There have been very few in field design changes necessary.

Pier Park West, Panama City Beach, Florida. Engineer-of-record responsible for designing a 100,000-square-foot shopping center civil layout in the prestigious Pier Park development in Panama City Beach. This project for Simon Properties, Inc, included design of 400 parking spaces, water, sewer, and stormwater piping layout, a lift station, and force main.

Twin Pines Subdivision, Pensacola, Florida - As a civil designer, Mr. Reid designed a 20-lot subdivision in the greater Pensacola, Florida area. Design included layout of roads, plan and profile, storm sewer, storm sewer inlets, water and gravity sewers, lot layout, road geometry, horizontal and vertical curves, etc. The projects also required extensive permitting and included permit application to FDEP for water, sewer, and stormwater retention.

Hidden Pines Subdivision, Pensacola, Florida - As a civil designer, Mr. Reid designed a 40-lot subdivision in the greater Pensacola, Florida area. Design included layout of roads, plan and profile, storm sewer, storm sewer inlets, water and gravity sewers, lot layout, road geometry, horizontal and vertical curves, etc. The projects also required extensive permitting and included permit application to FDEP for water, sewer, and stormwater retention.

Litvak Dental Clinic, Pensacola, Florida – Under contract to Dr. Litvak, DMD, Mr. Reid designed a site plan for a 5000 sf dental clinic including parking, entrance, grading and drainage plans near a major drainage canal in Pensacola, FL.

Chumuckla Strip Mall, Pace Florida – Under contract to a local business, Mr. Reid designed a site plan for 10,000 sf strip mall building in Pace, Florida. The mall design included parking, retention, entrances, and utilities.

City of Niceville, FL. – Drainage Modifications – Under contract to the city of Niceville, Mr. Reid provided engineering design support in modifying drainage systems in several neighborhoods having flooding issues within the city including: Valaparaiso Blvd, Palm Blvd, Maple Way, Palm Shopping Center, and Bayshore Drive. Modification to a dam was included in the work to replace the outlet structure, which included dredge and fill permit applications.

City of Springfield, FL – Drainage Modifications – Under contract to the city of Springfield, FL, Mr. Reid provided stormwater routing and design of existing subdivision that drained into Martin Lake. The subdivision has been experiencing flooding problems, and the design mitigated the problem by adding a retention pond to equilibriate the storm volumes.

City of Parker, FL – Sidewalk Construction Management – Under contract to the city of Parker, Mr. Reid was the construction engineer that managed the construction of 2 miles of concrete sidewalk. In addition, Mr. Reid designed about 2,000 LF of sidewalk extension in a congested neighborhood off Hwy 22a.

Bonifay, FL., Subdivision 40-Lot Conceptual Plan and Feasibility Study – Under contract to Preferred Equity Solutions, Corp. of New York City, Mr. Reid provided a schematic layout of a subdivision, attended county commission meetings, and provided a report documenting development costs and options.

Condominiums

The Hawk's Tower, Panama City, FL – As Engineering of Record, Mr. Reid worked with the client, Hawk's Tower LLC, to develop a civil plan for a 10-story 59-unit condominium. The plan included parking and boat slips along with brick pavers, sidewalks, and utility connections in the downtown area.

Ocean Villa, Panama City Beach, FL - Under contract to Century Construction, Mr. Reid worked with the client to develop a civil plan for a 20-story 100-unit condominium. The plan included parking and entrances, underground retention, sidewalks, and utility connections in a congested area of Front Beach Road in Panama City Beach.

Ocean Reef, Panama City Beach, FL – Under contract to Century Construction, as an engineer working on the project, Mr. Reid worked with the client to modify a stormwater retention area to meet FDEP and city of PCB guidelines. The project was for a 20-story 100-unit condominium. The plan included drainage design and consultation on the overpass/crosswalks

Emerald Beach Resort, Panama City Beach, FL – Under contract to Emerald Beach Resort, LLC, Mr. Reid provided support to the developer by recommending drainage plans and utilities evaluation. The project was a twin-tower 20-story condominium with over 1,000 units.

Tropic Winds, Panama City Beach, FL - Under contract to Century Construction, and as engineer of record, Mr. Reid worked with the client to develop a civil plan for a 20-story 100-unit condominium. The plan included parking and entrances, underground retention, sidewalks, and utility connections in a congested area of Front Beach Road in Panama City Beach. Parking was designed on both sides of the road and an overpass was designed by others.

Magnolia Bay Club (multi-use property, 69 residential lots and two 99-unit condominiums) located in Bay County, FL. Under contract to Taylor Woodrow, Mr. Reid was the Engineer-of-Record on the project, and signed and sealed a set of construction plans for the project including stormwater, utilities plans, access roads, covered parking spaces, turn lanes, lift station, and FDOT/FDEP/PCB permits.

FEMA Flood Studies – Under contract to various Home-Owner's Associations (HOAs), Mr. Reid provided V-Zone Risk Factor Studies for Flood Insurance evaluations on over a dozen condominiums in the Panama City Beach area.

Cost Estimating/Scheduling (Project Controls)

Ciba-Geigy Chemical Company Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Site, McIntosh, Alabama. Scheduler/cost estimator/on-site civil engineer for a \$40 million wastewater plant dismantlement, pesticide remediation, and hazardous waste land vault construction project regulated by the Alabama Department of Environmental Management (DEM) and U.S. Environmental Protection Agency (USEPA) Region IV (Atlanta). The project was a pesticide remediation site regulated under the auspices of the U.S. Superfund (CERCLA) statutory requirements. As the main project controls engineer, he was responsible for managing contractors to ensure the existing wastewater plant was decommissioned and the waste from numerous dumpsites and wastewater holding pond residues were stabilized and permanently disposed of in the on-site hazardous waste land vault. A new wastewater treatment plant was constructed on the property to service ongoing operations.

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U.S. Navy "Tiger" Team (Value Engineering) Team Member, Charleston, South Carolina. Mr. Reid was a "Tiger" team member responsible for supporting the Navy's Southern Division in Charleston and the Naval Facilities Engineering Services Center (NAVFESC) in Port Hueneme, California. Services included providing value engineering analysis for many Naval facilities in the continental U.S. and Hawaii. As the cost expert for the team, he provided detailed economic evaluations and environmental cleanup and associated construction cost analysis as part of the value engineering team.

Okaloosa County, Florida School Bond Projects – Under contract to Okaloosa County, FL., Mr. Reid provided construction estimates on new school construction and cost of remodeling of existing schools throughout the county. This was a joint-venture between Sverdrup Architects and BTG Inc. As a senior project manager, Mr. Reid provided quantity take-offs by taking design plans and digitizing the existing and proposed contours to determine earth mass-balance calculations. As part of the project, Mr. Reid conducted an audit of existing hardware and software at county schools to assist in developing a needs analysis for new computer systems.

Software Development (MS Excel and/or Management of Computer Programmers)

RACER Cost Estimating Software. Under contract to the USAF, Mr. Reid developed environmental software for the Air Force. The software used engineering principles to estimate quantities of fill, excavation, piping, motor size for pumps, number of valves, length of piping etc. The system known as parametrics has been patented by the Air Force and individuals and is on record at the US Patent office. The software Mr. Reid developed was approved by the US Congress for budgetary purposes for the federal government. Mr. Reid was manager of the parametric software development for BTG Inc., and duties included managing a staff of 20 engineers, scientists, and computer programmers to develop software for the military and federal employees. As chief engineer, Mr. Reid penciled down the engineering equations for the software team to put into development code. He then tested the code and insured that appropriate results were obtained. Later in the 9-year effort, he moved into management and headed up the quality control of the software. Initially, he was the engineer that developed the algorithms, and was responsible for about 25 models of the 100 or so that were ultimately built into the system. During site visits, Mr. Reid assisted federal employees in evaluating their sites, developed methods of cleanup (treatment train diagrams), and then used the software to determine the most economical solution to cleaning up bases. This support was critical in Base Realignment and Closure (BRAC) rounds I and II in the 1990s.

PACES (Parametric Automated Cost Estimating System) software package. Under contract to the USAF, Mr. Reid assisted in development of this software product that was used by the DoD for estimating the cost of military construction facilities such as barracks, dorms, hospitals, cafeterias, etc. Mr. Reid was a project engineer on the development team, and spent time providing quality control on the product.

USDOE Uranium Cleanup Software Model Development. Mr. Reid assisted in the development of this software product. It was used by the DoE to evaluate and budget for Uranium Site Cleanups. System testing indicated that the software cost output was accurate to within one percent of the actual budget. Mr. Reid provided engineering design and software programming for the project.

USN Environmental Cleanup Software – As a senior engineer, Mr. Reid provided support under contract to the USN to provide automation support for the US Navy's environmental cost product.

Government/Federal Support (DOE, Department of Interior [DOI], and Department of Defense [DOD])

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USN Environmental Cleanup Software – As a senior engineer, Mr. Reid provided support under contract to the USN to provide automation support for the US Navy’s environmental cost product.

Instruction/Teaching/Seminars

Environmental Courses - As an adjunct instructor, Mr. Reid was under contract to the USAF to teach their Base Remedial Project Managers (RPMs) how to evaluate and budget environmental site cleanups. One of the teaching aids was the RACER (Remedial Action Cost Engineering Requirements) software. A syllabus was generated, and courses were taught at:

- Old Dominion University,
- The Georgia Institute of Technology,
- The Air Force Institute of Technology (AFIT),
- The Air Force School of Aerospace Medicine (AFSAM) in San Antonio, Tx,
- Idaho State University,
- and client sites in D.C., Alaska, Hawaii, Florida, Texas, and many other states.

Construction Estimating Course - under contract to a government contractor, Mr. Reid provided a syllabus and course instruction on use of the Windows version of the US Army’s M-CACES (Micro-Computer Aided Cost Estimating System) software at a client site.

Expert Witness Support

Expert Witness Support – I worked as an expert-witness (Cost Engineer) for a national law firm Arent-Fox, et al., in Washington, D.C. on a landmark environmental case in Scranton, PA. I provided deposition support in D.C. and Philadelphia. The case was: Gould, Inc. v. A&M Battery and Tire Service, Inc., 232 F.3d 162 (3d Cir. 2000), rev’g, 987 F. Supp. 353 (M.D. Pa. 1997), on remand, 176 F. Supp. 2d 324 (M.D. Pa. 2001).

Published Articles

Information Management Tools for Estimating Cost of Surface Mining Reclamation, M.E. Reid and J.R. Craynon, American Society of Surface Mining and Reclamation (ASSMR), Proceedings, 17th Annual Meeting, A New Era of Land Reclamation, Tampa, FL June 11-15, 2000, P 459.

Automated Cost Estimating for Ordnance and Explosive Waste Remediation, Thurston, Marland, and Reid, Michael, American Defense Preparedness Association (ADPA), 21st Environmental Symposium & Exhibition Proceedings, April 1995.