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GENERAL INFORMATION

A. CONTRACTOR INFORMATION

Business Address:

Jim Stidham & Associates, Inc.
547 North Monroe Street, Suite 201
Tallahassee, Florida 32301
Phone: (850) 222-3975
Fax: (850) 681-0560

Principal:

Bill Rollins, P.G.
(850) 222-3975 x 119
brollins@jsna.com

Mailing Address:

Jim Stidham & Associates, Inc.
P.O. Box 3547
Tallahassee, Florida 32315

B. EXECUTIVE SUMMARY

The firm of Jim Stidham & Associates, Inc. (JSA) was formed in April 1983 to provide professional services in environmental and civil engineering and hydrology. Initially, JSA was a sole proprietorship, subsequently incorporating in 1989 and is now a Florida registered Sub-chapter S Corporation with the Department of State (Document Number L37644). The principals in the company are full time registered professional engineers, geologists, or surveyors who are actively involved with company projects from inception to completion. Our State Board of Professional Engineers registration certificate number is EB0005629 and State Board of Professional Geologists registration certificate number is GB0000134.

JSA is a qualified small business enterprise with our office in Tallahassee employing approximately fourteen (14) full-time personnel and four (4) part time. JSA provides civil and environmental engineering and geologic services throughout the State of Florida, as well as Georgia and Alabama.

Individuals who possess professional or technical registry include: Professional Engineers Bert Conoly, and Ben Rush and Professional Geologists, William G. Rollins (principal), Richard Kelly (principal), Dan Litteral, Dale Frierson and Scott Sigler. Approximately ten (10) other personnel possess technical degrees and/or training to augment and complete the diverse work effort of the firm.

JSA routinely provides full civil and environmental engineering services in drinking water and wastewater systems, road improvements, and drainage, storm water management planning and design. We routinely perform and complete Site Assessment Reports (SARs), Remedial Action Plans (RAPs), Phase I and II Environmental Assessments and ASTM Transaction Screenings. Additionally, all field activities are conducted in accordance with the Florida Department of Environmental Protection's SOP-001/01 FS200, FS2200 and FS3000 for the collection and analysis of surface water, groundwater and soils. Groundwater and hydraulic modeling are additional services offered by the firm.

We serve as our clients advocate from a regulatory, technical, and strategic perspective and negotiate with agencies on behalf of our clients. This approach has resulted in an extremely high percentage of return business and numerous referrals. We routinely receive above average satisfaction ratings from our clients with compliments for personalized service, cost effective and competitive fees, and reasonable design and approach to the project.

JSA is well qualified to provide complete water resource development and monitoring, petroleum contamination assessments, site remediation-action plans, Phase I and II environmental assessments, ASTM Transaction Screenings, underground tank closures, dry cleaning establishment preliminary testing and analysis, and a wide variety of other environmental services which may be required. We have developed an excellent rapport and working relationship with Florida Department of Environmental Protection

staff and have a thorough working knowledge of the state petroleum and dry cleaning cleanup program requirements.

JSA's Drilling Division also has three certified well drillers on staff to perform the installation and/or abandonment of monitoring wells for environmental assessment purposes. The drilling division is qualified to install soil borings and monitoring wells with our Mobil B61 HD and Failing F-7 rigs and AMS 9600 PRO Power Probe.

"Service, Integrity, and Quality" is the motto of JSA which establishes the standard each member of the firm attempts to attain in each project we accept and undertake. Our fundamental business philosophy centers on our commitment to client satisfaction while maintaining the highest standards of professional competence, coupled with timely results and financial sensibility. Our experienced team offers seamless delivery across the broad spectrum of civil, hydrogeological, and environmental engineering services.

Additionally, staff stability, individualized project contact, and full professional liability insurance protection are other factors which make JSA unique and which result in satisfied clients which return to obtain other or follow-on services. Jim Stidham & Associates, Inc. is proud of its record of past accomplishments, and its diverse and challenging current projects. We continually strive to excel and look to the future and the association with new clients.

DECLARATION OF GOOD FAITH

This declaration is provided to indicate that this RFP with Leon County is in all respects fair and in good faith without collusion or fraud and that the signer of this RFP has the authority to bind principal proponent. Jim Stidham and Associates, Inc. further declares that, to the best of the undersigned's knowledge and believe, all the information submitted for consideration and evaluation is true, correct, and accurate.

William G. Rollins, P.G. _____
Name

President _____
Title



Signature

March 17, 2011 _____
Date

C. REQUIRED FORMS AND CERTIFICATIONS

The forms and certifications listed below are attached following this sheet:

- ✓ Affidavit Certification Immigration Laws
- ✓ Equal Employment Policies
- ✓ Insurance Certification Form
- ✓ Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primarily Covered Transactions
- ✓ Local Vendor Certification form

RFP Title: Request for Proposals for Civil Engineering Services, Continuing Supply
Proposal Number: BC-03-17-11-25
Opening Date: Thursday, March 17, 2011 at 2:00 PM

**AFFIDAVIT CERTIFICATION
IMMIGRATION LAWS**

Leon County will not intentionally award County contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in 8 U.S.C. Section 1324 A(e) (Section 274a(e) of the Immigration and Nationality Act ("INA")).

Leon County may consider the employment by any Contractor of Unauthorized Aliens a violation of Section 274A(e) of the INA. **Such violation by the Recipient of the employment provision contained in Section 274A(e) of the INA shall be ground for unilateral cancellation of the contract by Leon County.**

BIDDER ATTESTS THAT THEY ARE FULLY COMPLIANT WITH ALL APPLICABLE IMMIGRATION LAWS (SPECIFICALLY TO THE 1986 IMMIGRATION ACT AND SUBSEQUENT AMENDMENTS).

Company Name: Jim Stidham & Associates, Inc.

Signature:  Title: President

STATE OF Florida
COUNTY OF Leon

Sworn to and subscribed before me this 10th day of March, 2011.

Personally known

OR Produced identification _____

(Type of identification)

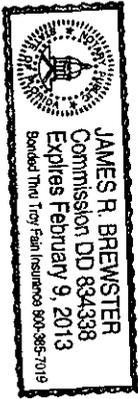

NOTARY PUBLIC

Notary Public - State of Florida

My commission expires: 2/9/13

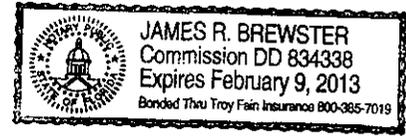
James R. Brewster

Printed, typed, or stamped
commissioned name of notary public



The signee of this Affidavit guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made.

**LEON COUNTY RESERVES THE RIGHT TO REQUEST SUPPORTING DOCUMENTATION,
AS EVIDENCE OF SERVICES PROVIDED, AT ANY TIME.**



RFP Title: Request for Proposals for Civil Engineering Services, Continuing Supply
Proposal Number: BC-03-17-11-25
Opening Date: Thursday, March 17, 2011 at 2:00 PM

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION STATEMENT

1. The contractors and all subcontractors hereby agree to a commitment to the principles and practices of equal opportunity in employment and to comply with the letter and spirit of federal, state, and local laws and regulations prohibiting discrimination based on race, color, religion, national region, sex, age, handicap, marital status, and political affiliation or belief.
2. The contractor agrees to comply with Executive Order 11246, as amended, and to comply with specific affirmative action obligations contained therein.

Signed:



Title:

President

Firm:

Jim Stidham & Associates, Inc.

RFP Title: Request for Proposals for Civil Engineering Services, Continuing Supply
Proposal Number: BC-03-17-11-25
Opening Date: Thursday, March 17, 2011 at 2:00 PM

Required Policy Endorsements and Documentation

Certificate of Insurance will be provided evidencing placement of each insurance policy responding to requirements of the contract.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the County, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

Endorsements to insurance policies will be provided as follows:

Additional insured (Leon County, Florida, its Officers, employees and volunteers) -
General Liability & Automobile Liability

Primary and not contributing coverage-
General Liability & Automobile Liability

Waiver of Subrogation (Leon County, Florida, its officers, employees and volunteers)- General
Liability, Automobile Liability, Workers' Compensation and Employer's Liability

Thirty days advance written notice of cancellation to County - General Liability,
Automobile Liability, Worker's Compensation & Employer's Liability.

Professional Liability Policy Declaration sheet as well as claims procedures for each applicable policy to be provided

Please mark the appropriate box:

Coverage is in place

Coverage will be placed, without exception

The undersigned declares under penalty of perjury that all of the above insurer information is true and correct.

Name William G. Rollins
Typed or Printed

Signature 

Date March 16, 2011

Title President

Authority)

(Company Risk Manager or Manager with Risk

RFP Title: Request for Proposals for Civil Engineering Services, Continuing Supply
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Opening Date: Thursday, March 17, 2011 at 2:00 PM

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION,
And OTHER RESPONSIBILITY MATTERS
PRIMARY COVERED TRANSACTIONS**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b) Have not within a three-year period preceding this been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of these offenses enumerated in paragraph (1)(b) of this certification; and
 - d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.
3. No subcontract will be issued for this project to any party which is debarred or suspended from eligibility to receive federally funded contracts.



Signature

William G. Rollins, President

Title

Jim Stidham & Associates, Inc.

Contractor/Firm

547 North Monroe Street, Suite 201, Tallahassee, Florida 32301

Address

LOCAL VENDOR CERTIFICATION

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

- a) Has had a fixed office or distribution point located in and having a street address within Leon, Gadsden, Wakulla, or Jefferson County for at least six (6) months immediately prior to the issuance of the request for competitive bids or request for proposals by the County; and
- b) Holds any business license required by Leon County (or one of the other local counties), and, if applicable, the City of Tallahassee; and
- c) Is the principal offeror who is a single offeror; a business which is the prime contractor and not a subcontractor; or a partner or joint venturer submitting an offer in conjunction with other businesses.

Please complete the following in support of the self-certification and submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name: Jim Stidham & Associates, Inc.	
Current Local Address: 547 North Monroe Street, Suite 201, Tallahassee, Florida 32301	Phone: 850-222-3975 Fax: 850-681-0560
If the above address has been for less than six months, please provide the prior address.	
Length of time at this address:	
Home Office Address: 547 North Monroe Street, Suite 201, Tallahassee, Florida 32301	Phone: 850-222-3975 Fax: 850-681-0560

William F. Rollins
Signature of Authorized Representative

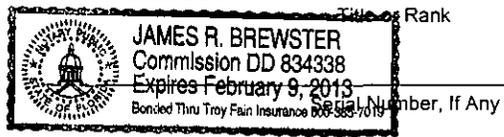
March 10, 2011
Date

STATE OF Florida
COUNTY OF Leon

The foregoing instrument was acknowledged before me this 10th day of March, 2011.
 By William F. Rollins, of Jim Stidham & Associates, Inc
(Name of officer or agent, title of officer or agent) (Name of corporation acknowledging)
 a Florida corporation, on behalf of the corporation He/she is personally known to me
(State or place of incorporation)
 or has produced Will Know as identification.
(type of identification)

James R. Brewster
Signature of Notary
James R. Brewster
Print, Type or Stamp Name of Notary

Return Completed form with supporting documents to:
 Leon County Purchasing Division
 1800-3 Blair Stone Road
 Tallahassee, Florida 32308



Environmental Support Services

A. ABILITY OF PROFESSIONAL PERSONNEL

1. TOTAL NUMBER OF PROFESSIONALS WITHIN JSA FOR SUPPORT

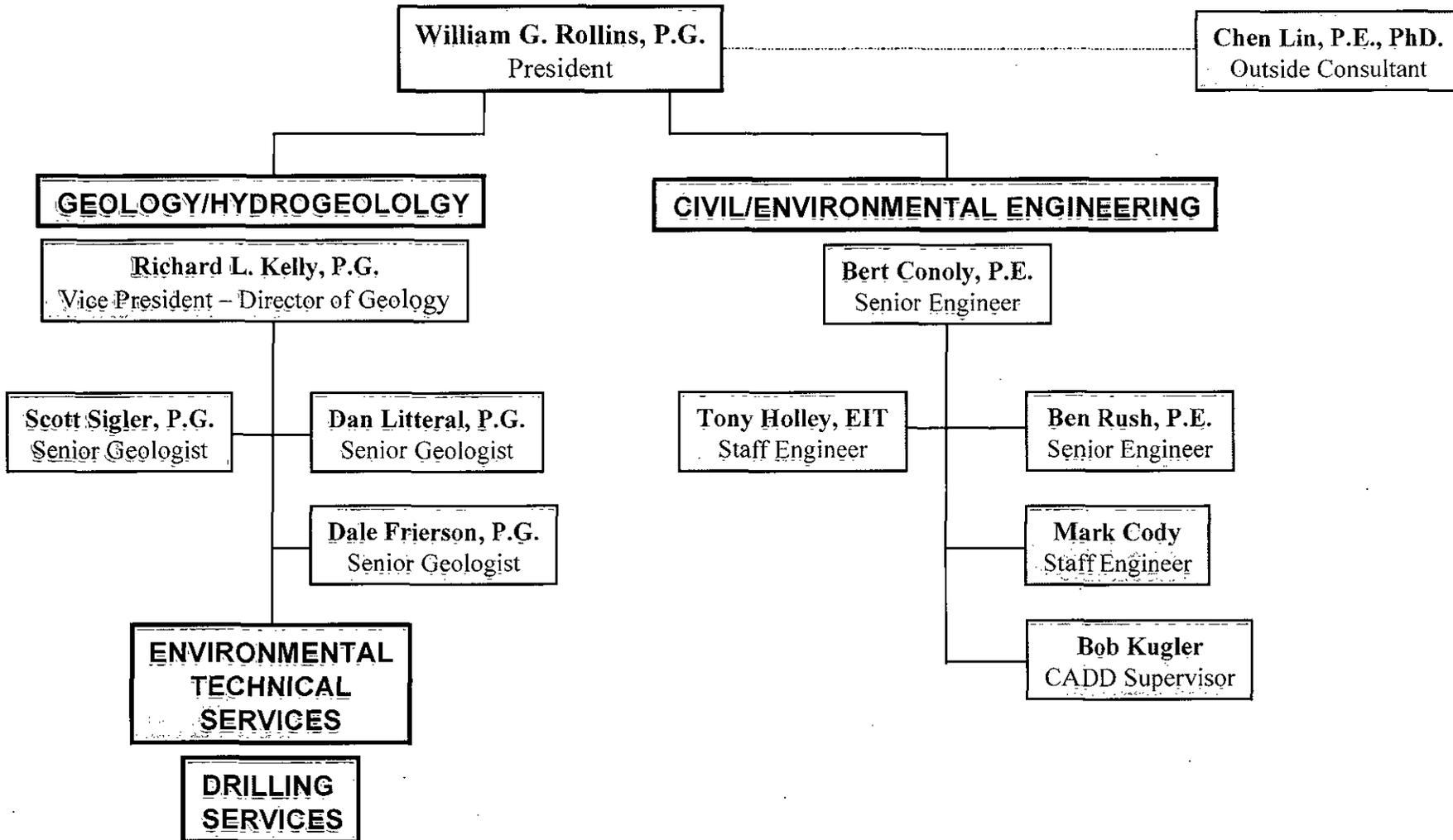
JSA has a team of fourteen (14) Civil and Environmental Engineers, Geologists, Environmental Scientists, Chemists, and environmental technicians with the ability to provide a wide range of environmental support services. Among these professionals are two (2) Professional Engineers, five (5) Professional Geologists, several staff engineers and a chemical hydrologist. All professional staff are highly experienced with nearly 150 years combined professional experience.

Each professional is not only highly experienced in their respective technical discipline, but also fully trained and capable in project management. This provides a streamlined multi-disciplined management approach that combines technical and managerial training to offer the highest efficacy in project implementation.

JSA also has a full service drilling division with highly experienced licensed well drillers, who work hand in hand with both the client and the overseeing professional who is managing the project.

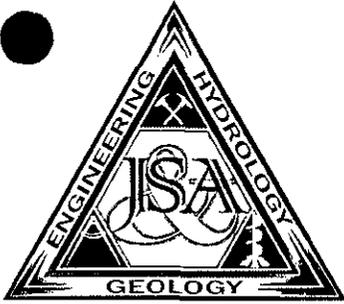
JSA understands that time is of the essence for any project. JSA has the commitment from its management to supply necessary resources to ensure compliance of all regulatory requirements, necessary technical expertise, and timely and cost effective completion of any project assigned to our team. With JSA's broad knowledge base and management philosophy, we are able to direct the necessary resources toward any project we are assigned.

On the following page JSA has provided an organizational chart showing our corporate structure.



2. RESUMES OF KEY PROFESSIONALS

On the following pages are resumes for the key personal that will be assigned to any project associated with environmental support services.



BENJAMIN H. RUSH, P.E.
ENVIRONMENTAL ENGINEER

Mr. Rush has over 9 years of experience in environmental engineering support for remedial investigation/feasibility studies and remedial design/remedial action activities for petroleum, hazardous waste, and mixed waste contaminated sites. He has experience with project management; proposal preparation; construction oversight for all civil projects including water, remedial systems, and source removal activities; conducting engineering field inspections to monitor the effectiveness of remedial system operation and maintenance (O&M); assessing the performance of pollution control systems; conducting soil, groundwater, and air sampling; and development of remedial action plans and O&M reports. He also conducts industrial permit compliance monitoring, including monitoring for RCRA and Clean Air Act Title V compliance.

Project Engineer and Manager, Statewide Petroleum Pre-Approval Clean-up Program; Florida

Mr. Rush provides engineering support during remedial action plan development and bidding/proposal development, construction oversight, remedial system start-up, O&M, and troubleshooting at various petroleum contaminated sites. He has designed and operated the following technologies: soil vapor extraction (SVE), in-situ air sparging (AS), bioremediation, in-situ chemical injection, pump and treat, conventional excavation, and large diameter auger (LDA) excavation. At the Kool Beanz site in Tallahassee, he was responsible for the construction oversight of an AS/SVE system with activated carbon, start-up and O&M. He also provided support for remediation action plan development and bidding/proposal documents for City of Tallahassee Wastewater Treatment Plant, source removal by large diameter augers (~ \$1 million); Whitaker Oil Company's bulk storage facility, 180 plus well air sparge/soil vapor extraction system (~\$ 1 million); Coastal Lumber Company, 22,000 plus ton excavation (~ \$1.2 million); and over 10 other petroleum contaminated sites ranging from approximately \$250,000 to \$1.5 million.

Contaminated Soil Removal Activities; Northwest Florida

Mr. Rush has conducted source removals of contaminated soils and development of source removal reports for state and local agencies for several private clients. He organizes removal activities with state and local agencies, property owners and contractors. He has experience with equipment operation, so he can perform soil removal, and coordinates the proper disposal of contaminated soil with waste disposal contractors.

Confidential Client; Perry, Florida

For the past 7 years, Mr. Rush has been responsible for the compliance and monitoring of the Confidential Client's RCRA hazardous waste treatment facility operation permit (Open Burn Unit) and the industrial wastewater treatment plant operation permit for their electroplating wastewater treatment process. He conducts soil, groundwater, and particulate sampling and report development in accordance with permits by the Florida Department of Environmental Protection (FDEP) and USEPA Region 4. He assisted in the development of client's RCRA permit renewals,

EDUCATION

B.S., Environmental Engineering
Sciences; University of
Florida

CERTIFICATIONS

Licensed Professional Engineer;
State of Florida

**TRAINING/OTHER
QUALIFICATIONS**

OSHA 40-Hour Hazardous Waste
Operations and Emergency
Response (HAZOPER)
Training

OSHA 8-Hour Refresher Course
(29 CFR 1910.120),
annually

Employment History

Jim Stidham & Associates, Inc.,
Senior Engineer,
September 2005 – present

Ecology & Environment, Inc.
Staff/Field Engineer,
November 2003 – August 2005

Northwest Florida Water
Management District (NFWMD),
Staff Engineer,
January 2002 – October 2003

Benjamin H. Rush, P.E. (Cont.)

which encompasses the entire facility, all approved by FDEP, and significantly reduced the amount of compliance and monitoring criteria for the facility, compared to their previous permits.

Statewide Hazardous Waste Site/Dry-Cleaning Solvent Cleanup Program; Florida

Mr. Rush provided engineering support during the remedial action plan development and bidding/proposal development, construction oversight, remedial system start-up, O&M, and troubleshooting, at various hazardous wastes and dry-cleaning solvent sites throughout Florida. At the Silvex smelter site in St. Augustine, where a very successful groundwater and soil treatment program included the use of bioreactor/biological treatment to result in over 99% contaminant reduction, he performed system O&M, troubleshooting, sampling, and the development of quarterly and annual reports. At the Cinderella Cleaners site in Palm Beach, he performed potassium lactate solution injections, construction oversight on the installation of a soil vapor extraction system, start-up, O&M, and troubleshooting. At the Oak Hill Cleaners site in Jacksonville, he performed construction oversight for the installation of a soil vapor extraction system, system start-up and troubleshooting, and the injection of hydrogen peroxide solution, to address groundwater contamination. He was also responsible for similar activities at ten other sites throughout the state.

Groundwater Remediation System for Harris Corporation; Quincy, Illinois

Mr. Rush provided contaminant evaluation, performed system O&M, troubleshooting, CADD, and general engineering support, to monitor the progress of site remediation. He was responsible for verifying compliance with water and air discharge/emission permit requirements at the Harris Corporation's telecommunication equipment manufacturing facility. This system is a large dual phase extraction system (over 15 extraction wells), for the purpose of removal of chlorinated solvents from the soil and groundwater. He performed oversight of the pneumatic fracturing of the thick clay soils in the contaminated area that enhanced the recovery of chlorinated contaminants.

Patrick Air Force Base (AFB) and Cape Canaveral Air Force Station; Florida

Mr. Rush provided construction oversight, general engineering support, and CADD support for several projects. He provided engineering design support and construction oversight for the removal and installation of oil/water separators, backflow prevention devices, and upgrades to parking/storage containments, under NPDES and SPCC regulations, at multiple maintenance and wash facilities. He provided construction oversight and general engineering support for the management and treatment of deluge water generated during rocket launches at Complex 17A/B. He conducted wastewater source/treatment evaluations and sampling for evaluation of discharges and recommendations to the wastewater treatment plant. He conducted UIC surveys at base facilities for input into FDEP's UIC database and made recommendations for compliance with UIC regulations.

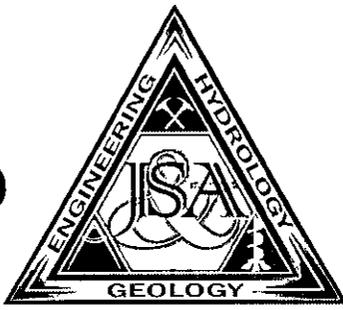
Benjamin H. Rush, P.E. (Cont.)

Surface Water Management Projects; Northwest Florida

Mr. Rush was involved with the permit review and construction of surface water management facilities in northwest Florida. He completed hydrological investigations, hydraulic analyses and flood routing through reservoirs, and technical reviews of engineering designs and environmental reports. He performed on-site inspections during and after facility construction, to ensure adherence to permit conditions related to design and water quality protection. He also addressed water quality issues related to forestry practices, and wetland restoration projects stemming from enforcement cases involving the destruction or alteration of wetland systems.

Additional Engineering Projects; Gainesville, Florida

During college, Mr. Rush provided engineering support, sampling, and CADD services for projects involving geotechnical drilling, soil classification, construction material testing, and laboratory testing for permeability and wet/dry densities. He participated in Phase I and II Environmental Site Assessments and provided on-site coordination with client representatives.



Embert (Bert) Jackson Conoly Jr., P.E.

Principal Engineer

EDUCATION

B.S. Agricultural Engineering,
University of Georgia

CERTIFICATIONS

Licensed Professional Engineer,
States of Florida & Georgia

TRAINING/OTHER QUALIFICATIONS

Forty Hour Hazardous Waste Site
Safety Training meeting
requirements of 29 CFR
1910.120,
Current 8 hour refresher

Employment:

Jim Stidham & Associates, Inc.,
Principal Engineer,
July 2005 – Present

Ecology and Environment, Inc.
Professional Engineer
May 2004 – July 2005

Advanced Environmental
Technologies, LLC.,
Vice President of Engineering,
October 2002 – April 2004

WRS Infrastructure &
Environment, Inc.,
Project Manager
June 2000 – October 2002

Florida Department of
Environmental Protection,
Site Manager,
November 1992 – June 2000

Georgia Power Company
Electric Utility Engineer
August 1981 – May 1992

Mr. Conoly has nearly 30 years professional experience in the engineering and engineering management field. His expertise ranges across several disciplines including the Environmental, Civil, Agricultural, and Electrical Engineering fields. Previous career responsibilities have included design and preparation of engineering submittals including proposals, plans, design documents, record drawings, and reports for civil engineering projects, industrial and environmental permitting, and assessment and remediation of contaminated groundwater and soil at petroleum cleanup sites. Mr. Conoly currently provides Civil/Environmental Engineering services for Jim Stidham & Associates, Inc. (JSA). In addition to his technical expertise, he has managed and supervised technical and professional staff including engineers, geologists, biologists, and project managers. He also has several years of regulatory review and rule making experience as well as client liaison experience with city and county governments, water and electric utilities, FDEP, Water Management Districts, and other regulatory bodies.

Civil/Environmental Engineering

Mr. Conoly currently performs a wide variety of Civil and Environmental Engineering responsibilities ranging from permitting and design to preparing construction proposals, alternative evaluations, construction schedules, and plans, specs, and record drawings for projects. The wide variety of projects he has been responsible for ranges from simple parking lot design and environmental permitting to potable water system design and planning, earthen dam design, and SPCC plans.

Mr. Conoly is the Engineer of Record for approximately 35 miles of 2" to 8" water main for a private, rural water system in Jefferson County. He has been involved in all aspects of planning, design, permitting, funding, and construction of the project including system planning, base mapping of franchise area, hydraulic analyses and system design, rural development grant/loan, FDOT permitting, FDEP permitting, CSX Railroad permitting, Jefferson County permitting, plans/specifications and contract documents, bidding and construction award, contract administration, and construction oversight. The \$3,000,000 project originated in 2006 and was successfully completed in 2010.

He has designed and implemented several construction projects ranging from dam design, permitting, and construction for a local plantation to parking lot modifications for a State Agency.

He also provides complete permitting services for several private clients. He is experienced in permitting mechanisms for The City of Tallahassee, Leon County, North West Florida Water Management District, FDEP, Us Army Corps of Engineers,

Bert Conoly, P.E. (Cont.)

and other entities. Additionally, he is experienced with federal permitting such as SPCC Plans and NPDES Discharge Permits.

Petroleum Contaminated Groundwater and Soil Remediation

For several years Mr. Conoly has designed and implemented Remedial Action Plans (RAPs), as a professional engineer, for sites with petroleum contaminated groundwater and soils in the private sector. He currently provides a wide variety of environmental engineering services related to Petroleum Contamination remediation.

Engineering Design and Management Experience

Technologies and strategies he has used include soil vapor extraction (SVE), in-situ air sparging (AS), bioremediation, pump and treat, large diameter auger (LDA) excavation, chemical oxidation, and conventional excavation. Duties have included preparation and implementation of pilot test plans, cost analysis reports, RAPs, Limited Scope RAPs, remedial alternative analyses, excavation plans, bid packages, etc. In addition to his hands-on technical design and implementation experience, he also has managed a remedial team as Vice President of Engineering for a private consulting firm. His team of seven engineers was very successful in the Petroleum Remediation filed in several states, operating out of four offices in Georgia and Florida.

Regulatory Experience

Mr. Conoly has also served on the regulatory side of the industry as a RAP Reviewer and technical specialist, project manager and supervisor. He served eight years in the FDEP and three years in the privatized FDEP review teams (Teams 5 and 6). He has been involved with literally hundreds of sites in Florida from Key West to Pensacola either as engineer, technical specialist, site manager, regulatory manager, or consultant. He has been involved with rule making, innovative remedial technology evaluation, contractor evaluation and supervision, forensics, and FDEP planning as well as technical review of documents and plans. These engagements entailed the supervision of up to seventeen PEs, PGs, site managers, and administrative staff while acting as project manager for FDEP's Petroleum Cleanup Program site management contract (Team 5). This project was the first instance of FDEP's use of private contractors

Bert Conoly, P.E. (Cont.)

for staff augmentation in the realm of technical review and site management at Petroleum Cleanup sites. Mr. Conoly also acted as liaison between WRS's management team and FDEP's management team overseeing team activities and functions, offering technical support and training for engineering staff, providing final review of work orders, proposals, and invoices, scheduling and managing employee workloads, tracking contract and financial performance, and supervising day-to-day activities.

Contract Manager/Technical Review

In addition to technical review and design responsibilities, for approximately two years Mr. Conoly was responsible for a variety of duties with the FDEP Petroleum Cleanup Program. These duties ranged from contract management (Dade County and Palm Beach County Local Program Contracts), technical review (Technical Support Section) and project management (acting as site manager and lead engineer) in the Preapproval Program. In each of these capacities, he was responsible for providing a wide variety of professional and technical services as well as regulatory review and evaluation/audit duties.

Energy Services Engineer

Mr. Conoly was engaged from 1981 through 1992 in multiple capacities in one of the country's largest electric companies with a variety of increasing responsibilities throughout Georgia. These duties included Energy Services Engineer, Marketing Engineer, and Power Services Engineer. Each position presented challenging opportunities from energy management, HVAC design, lighting and power design to outdoor lighting planning and design, and distribution system planning and engineering. He developed an advanced knowledge of electrical power design, utility operations, and critical customer needs ranging from engineering design to system planning and customer service needs related to commercial and industrial customers.



ROBERT D. FRIERSON

PROFESSIONAL GEOLOGIST

Mr. Frierson has over 10 years of experience in the management of environmental assessment and remediation activities at petroleum, hazardous waste, and mixed waste contaminated sites. Mr. Frierson has served as a project manager with Jim Stidham & Associates, Inc. (JSA) for more than 4 years (including one year from 2001 to 2002). Mr. Frierson previously worked with WRS Infrastructure & Environment, Inc. (WRS) for 6 years. Mr. Frierson began with WRS in the capacity of Staff Geologist and rapidly advanced to a Contract Manager position prior to returning to JSA. He coordinates and manages field investigative and remedial activities and prepares associated deliverables. He also provides job cost accounting, including cost analysis and effectiveness. Mr. Frierson's experience includes project management, proposal preparation; removal and closure of underground storage tanks (USTs); Phase I and II Environmental Site Assessments; source removals; contamination assessments; environmental site audits; monitor well installation, development, and abandonment; sampling of various media; aquifer testing; downhole and surface geophysics; formulation of technical plans and costing; and data reduction and report generation. He has worked within the CERLA, RCRA, USEPA, OSHA, and multiple State regulatory environments.

EDUCATION

B.S., Geology;
Florida State University

CERTIFICATIONS

Registered Professional
Geologist; State of
Florida

TRAINING/OTHER QUALIFICATIONS

US Army Corps of Engineers
Construction Quality
Management for
Contractors

Hands-On Field School for
Petroleum Contamination
Cleanup, University of
Florida TREEO Center

OSHA 40-Hour Hazardous
Waste Operations and
Emergency Response
(HAZOPER) Training

OSHA 8-Hour Refresher
Course (29 CFR
1910.120), annually

OSHA 8-Hour Supervisor/
Management Training

At Jim Stidham & Associates, Inc., Mr. Frierson is responsible for all aspects of Phase I and II Environmental Site Assessments for Commercial Real Estate Transactions. Mr. Frierson has been educated in ASTM Standards E1527-05. In addition, he has been educated on and worked within the 2005 Environmental Protection Agency Rule for All Appropriate Inquiry, 40 CFR Part 312. Mr. Frierson also manages multiple Florida Department of Environmental Protection Petroleum Pre-Approval Cleanup Program site assessments and other non-program contamination assessments under the Florida Department of Environmental Protection's jurisdiction.

Project Manager, John G. Riley Elementary School, Tallahassee, Florida (Contract Value = \$75,000)

Mr. Frierson served as the lead scientist and project manager for the assessment of petroleum and metals impacted soil at this site. Mr. Frierson was responsible for all aspects of the project including proposal preparation, project management, and direct oversight of field activities. A previous consultant identified petroleum and metals impacted soils at the site during the closure of three underground storage tanks (USTs) formerly containing heating oil. During the site assessment, JSA demonstrated contaminants in site soil would not leach to groundwater, thereby eliminating a potentially costly and time consuming groundwater assessment. JSA also eliminated two of the three inorganic contaminants (arsenic and barium) by establishing alternative Cleanup Target Levels for the site. Mr. Frierson also assisted the LCSB with completion of the Initial Notice of Contamination procedures for the site. Following the completion of assessment activities, Mr. Frierson assisted the client with preparation of a Restrictive Covenant and supporting documentation to obtain a Site Restoration Completion Order with Institutional and Engineering Controls.

Project Manager, Private Client, Pre-Development Phase II Assessment, Tallahassee, Florida (Contract Value = \$35,000)

Mr. Frierson served as the lead scientist and project manager for the assessment of chlorinated solvents at a documented former drycleaner site in preparation of proposed development activities. The site was formerly occupied by a drycleaning facility for approximately 10 years and groundwater contamination associated with the former drycleaner had been previously documented. Jim Stidham & Associates, Inc. was tasked with conducting a modified Phase II Environmental Site Assessment to determine the potential impacts to construction based on proposed development plans for the site. Mr. Frierson was responsible

Robert D. Frierson (Cont.)

for all aspects of the project including proposal preparation, project management, and direct oversight of field activities. Mr. Frierson assisted with the development of a soil screening and laboratory analysis plan based on historical building plans, proposed construction drawings supplied by the developers, and the contaminants of concern associated with drycleaning sites. Soil gas sampling (using the AQR Color-Tec[®] Method) was utilized to screen site soils on a 10-foot grid. Two (2) Color-Tec[®] colorimetric screening methods were utilized to guide assessment of soil at the site. Soil gas samples were collected to approximate potential areas of concern. Soil matrix samples for analysis by the Color-Tec[®] colorimetric method were then collected from a range of soil gas sample results in an attempt to provide comparable range of soil matrix results. Confirmatory laboratory soil samples were collected at select Color-Tec soil matrix sample locations for correlation of data and to confirm the presence of chlorinated volatile organic halocarbons (CVOH) detected through analysis of soil gas samples. The subsequent report provided the findings of the limited assessment and recommendations for minimizing the impact of contact with contaminated media during construction.

Project Manager, Private Client, Chlorinated Solvent Assessment, Gainesville, Florida (Contract Value = \$85,000)

Mr. Frierson served as the lead scientist and project manager for the assessment of chlorinated solvents at a former printed circuit board manufacturing facility in Gainesville, Florida. In the late 1980's a fire at the facility resulted in the release of an unknown quantity of tetrachloroethene (PCE) to site soil and groundwater. The site was assessed by various consultants on an intermittent basis from the time of the release through 2008. Jim Stidham & Associates, Inc. was tasked with expeditiously completing site assessment activities due to the prolonged and expensive nature of the assessment to date. Mr. Frierson was responsible for all aspects of the project including proposal preparation, project management, and direct oversight of field activities. Mr. Frierson oversaw the review of historical documentation and assisted in the development for a cost effective and expedient assessment plan to satisfy the requirements for site assessment in accordance with Chapter 62-780, FAC. The AQR Color-Tec[®] Method for screening of chlorinated volatile organic halocarbon impacted soils was utilized to assess impacts to site soil prior to collection of laboratory analytical samples, thereby reducing in-field labor hours and minimizing the number of laboratory soil samples required. Mr. Frierson worked closely with the client and FDEP to develop an efficient groundwater sampling plan and interim groundwater recovery plan to minimize the offsite migration of chlorinated solvents off-site. Mr. Frierson also assisted the client with completion of the Initial and Supplemental Notice of Contamination procedures for the site. Site assessment and groundwater recovery are ongoing at the site.

Contract Manager, Southern Division Naval Facilities Engineering Command Southeast, Environmental Multiple Award Contract (EMAC); Florida (Contract Value = \$7.2 Million)

As contract manager for WRS's EMAC contract, Mr. Frierson was responsible for a multi-year, \$25 million Indefinite Delivery/Indefinite Quantity (ID/IQ) type contract. In this capacity, Mr. Frierson was responsible for programmatic issues, including client communication and coordination and project execution. He managed eleven delivery orders worth approximately \$7.2 million. Project execution of these delivery orders involved traditional and innovative excavation activities, excavation retainage design assistance, in-situ soil vapor extraction, and groundwater extraction and capping alternatives for the remediation of a variety of contaminants.

Project Manager for various Contract Task Orders (CTO) issued under the EMAC; Florida

Robert D. Frierson (Cont.)

As project manager for WRS, Mr. Frierson's responsibilities included preparation of work plans/cost estimates, project management, and quality control of the services, including: contamination assessment, remedial action, remedial action implementation, environmental assessment, storm water management, storm water infrastructure design/repair and replacement, waste management, waste characterization and profiling, and transportation and disposal. He was also responsible for creating proposals, generating waste management plans, generating sampling and analysis plans, storm water pollution prevention plans, environmental protection plans, communicating with regulatory agencies, client communication, and project management of other selected projects outside the EMAC program. He frequently interacted with local and federal regulatory agencies, such as the United States Environmental Protection Agency, the Florida Department of Environmental Protection, and the Florida Department of Health.

Project Manager, Naval Station Mayport, Solid Waste Management Unit 15 (SWMU-15); Mayport, Florida (Contract Value = \$350,000)

Under the WRS EMAC contract, Mr. Frierson oversaw the construction of a 5,200 square foot Resource Conservation and Recovery Act (RCRA) cap and associated dry storm retention pond. He was responsible for proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Project Manager, Naval Station Mayport, Solid Waste Management Unit 17 (SWMU-17); Mayport, Florida (Contract Value = \$15,000)

Mr. Frierson oversaw the construction of a Resource Conservation and Recovery Act (RCRA) cap, under the WRS EMAC contract. He was responsible for proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Project Manager, Naval Air Station Jacksonville, Potential Source of Contamination 46 (PSC-46), Defense Reutilization and Marketing Office (DRMO); Jacksonville, Florida (Contract Value = \$800,000)

Site activities included demolition, transport and disposal (T&D) of over 450 tons of concrete cover; excavation, segregation, and load-out of over 1,100 tons of Ra-226 impacted soil and point sources; excavation, segregation, load-out, and T&D of over 2,100 tons of non-hazardous soil; excavation, segregation, load-out, and T&D of over 350 tons of hazardous soil; and T&D of approximately 19,300 gallons of non-hazardous petroleum contact water. Personnel provided quality control oversight for the performance of all MARSSIM final status surveys and the collection of 56 confirmatory soil samples. The soil samples were analyzed for Ra-226 and the Ra-226 decay series. Mr. Frierson was responsible for the proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Project Manager, Naval Air Station Whiting Field, AVGAS Pipeline Section E; Milton, Florida (Contract Value = \$1.6 Million)

This project included the design and installation of excavation shoring, conventional excavation of petroleum impacted soils, transport and disposal of site soils impacted by aviation gasoline and other petroleum products, and the installation and post remedial monitoring of groundwater monitoring wells. Mr. Frierson was responsible for the proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Robert D. Frierson (Cont.)

Lead Scientist, Outlying Landing Field (OLF) Bronson, Site 1116; Pensacola, Florida

Mr. Frierson served as Lead Scientist and Assistant Project Manager for the supervision of source removal and post remedial monitoring activities associated with the OLF Bronson, Site 1116 project. Responsibilities included the collection and tracking of geotechnical and analytical soil samples; guidance and oversight for source removal by conventional methods; installation, development, and sampling of groundwater monitoring wells; data reduction; generation of a Project Completion Report and Quarterly Monitoring Reports; cost tracking; project implementation; and project submittals.

Lead Scientist, Outlying Landing Field (OLF) Bronson, Site 1107; Pensacola, Florida

Mr. Frierson served as Lead Scientist for the supervision of source removal and post remedial monitoring activities associated with the OLF Bronson, Site 1107 project. Responsibilities included the collection and tracking of geotechnical and analytical soil samples; guidance and oversight for source removal by Large Diameter Auger rig; installation, development, and sampling of groundwater monitoring wells; data reduction; and generation of a Project Completion Report and Quarterly Groundwater Monitoring Reports.

Lead Scientist, FDEP Hazardous Waste and Chlorinated Solvent Cleanup Program Contract; Florida

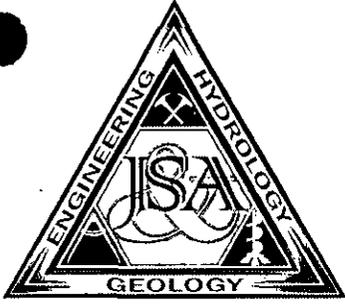
Mr. Frierson served as Lead Scientist for the supervision of assessment and monitoring activities associated with the FDEP Hazardous Waste Site Dry-cleaning Solvent and Petroleum Cleanup Programs. These activities included operation and maintenance of treatment systems; chlorinated solvent site assessments; monitor well installation, development and abandonment; groundwater sampling; surface water sampling; sediment/soil sampling; natural attenuation sampling; data reduction; and site assessment report generation. Global Positioning System (GPS) technology was used during site investigations to locate environmental sample locations and site map production.

Project Manager/Lead Scientist, FDEP Petroleum Preapproval Program Contract; Florida

Mr. Frierson served as Project Manager/Lead Scientist for the assessment of petroleum-contaminated sites in Florida and South Georgia for clients including FDOT, FDEP, and GAEPD from November 2001 to November 2002. He was responsible for the management of subcontracted field crews, soil boring and monitor well installation, soil and groundwater sample collection and aquifer characterization, and FDOT right-of-way permit acquisition. He prepared and reviewed Contamination Assessment Reports (CARs) and Remedial Action Plans (RAPs) for petroleum sites in Florida, pursuant to Chapter 62-770, FAC, and hazardous waste sites for public and private clients. Projects have included Pug's Beer & Wine, C&T Variety, and Planter's Exchange, as well as private clients.

Geologist, FDEP Geological Survey; Tallahassee, Florida

Mr. Frierson has assisted in the production of geologic maps of the state of Florida. The production of these maps included the collection of lithologic, topographic, and hydrologic data in the field; interpretation and data reduction; installation of surficial aquifer monitor wells; collection and logging of lithologic cores; and field mapping of geologic exposures.



RICHARD KELLY, P.G.

VICE PRESIDENT

GEOLOGY / DRILLING

With over 17 years experience with JSA in the environmental field, and over 28 years experience in the water well and monitor well installation field, Mr. Kelly serves as both the head of JSA's Drilling Division and as a JSA environmental project manager. As head of JSA's Drilling Division, Mr. Kelly coordinates all drilling activities, ensures property conditioning of equipment, and manages all drilling personnel. Mr. Kelly is responsible for drilling proposal preparations, drilling scope preparation, drilling quality control, and drilling invoicing. He is also involved in the development of drilling clientele. Mr. Kelly is also in charge of the management and operation of the Failing F-7 Auger/Rotary drill rig, the Mobil B61 HD drill rig, and the AMS 9600 PRO Series Direct Push Drill Rig, during the installation of monitor wells and soil borings. Mr. Kelly's project management duties consist of supervising and coordinating contamination assessment activities, including soil, water, and air sampling projects; installation of monitoring wells and soil borings; and report preparation, including test analysis, groundwater flow analysis, and figures. He performs groundwater modeling to help determine the most effective remediation system, and prepares remedial action reports. His other duties at JSA include the oversight and management of JSA's Preapproval Cleanup Program for FDEP sites.

EDUCATION

B.S., Geology;
Florida State University
A.A., Business Studies;
Florida Community
College of Jacksonville

CERTIFICATIONS

Licensed Professional Geologist,
State of Florida
Licensed Water Well Contractor,
State of Florida

MEMBERSHIPS

National Groundwater Association
Florida Groundwater Association
National Drillers Association

**TRAINING/OTHER
QUALIFICATIONS**

Princeton Remediation Course

40-Hour Hazardous Waste Site
Safety Training to meet the
requirements of 29 CFR
1910.120, Current 8-Hour
Refresher

EMPLOYMENT HISTORY

1994-Present: Jim Stidham &
Associates, Inc-
Geologist/Principal
1993-1994: United States
Geological Survey:
Scientific Tech
1983-1990: Jones Well Drilling,
Inc.: Water Well
Contractor

PROJECT MANAGEMENT HISTORY

Florida State University; Tallahassee, Florida

Since the late 1990's, Mr. Kelly has performed numerous petroleum tank removal/closures, assessments, and remediation activities for Florida State University. These activities included project management for the removal of underground storage tanks (USTs) for over 10 sites on the FSU main campus and on remote FSU campus locations. Tank removal activities included contracting and managing qualified licensed Petroleum Contractors to remove the USTs, performance of a Tank Closure Assessment for each site, and submittal of a completed Tank Closure Assessment Report for each UST removal site. Mr. Kelly has also been responsible for the performance of several petroleum contamination assessments on the FSU Campus. These included 7 UST related contamination assessments that required extensive soil and groundwater assessment activities through the installation and sampling of soil borings and monitor wells. These assessments also included area and regional potable well impact assessments and area geological studies. A "No Further Action" was obtained from the Florida Department of Environmental Protection for all 7 sites. Mr. Kelly was also the project manager for 2 FSU petroleum impacted sites that were funded by the FDEP Preapproval Cleanup Program (through the Inland Trust Protection Program). Both of these sites (the Doak S. Campbell Stadium and the FSU Booster House) involved extensive soil and groundwater assessment activities. Mr. Kelly prepared and executed source removal remedial action plans for both sites that resulted in a "No Further Action" from the FDEP. Other projects directed and executed by Mr. Kelly on the FSU campus are an emergency tank removal and large source removal at the FSU President's House that also resulted in a "No Further Action". Mr. Kelly has

Rick Kelly, P.G. (Cont.)

also performed several Phase II assessments in areas of suspected chemical discharges on the FSU Campus. He has also served as a project manager for the design and installation of aboveground storage tanks for Florida State University.

Florida Department of Management Services (FDMS)

Since the early 1990's, Mr. Kelly has served as a project manager for several FDMS projects. These projects have included tank closure assessments, contamination assessments, petroleum tank design and installations, remedial action plan preparation and execution, and the assistance in construction design and oversight. Mr. Kelly has been responsible for the removal of underground storage tanks at several FDMS buildings that include 2 sites that facilitate FDEP buildings. Mr. Kelly was responsible for the removal of a UST at the FDEP Northwest District Building in Pensacola, which also included a site assessment, source removal, and a monitoring only plan, that subsequently resulted in a "No Further Action" at this site. He also directed and managed the installation of a replacement emergency aboveground storage tank at this site. Mr. Kelly performed a contamination assessment for the FDEP Twin Towers Building in Tallahassee, Florida that resulted in a "No Further Action". Additionally, Mr. Kelly responded to 2 releases of ethylene glycol for the Southwest Florida FDEP Building in Ft. Myers, Florida. Through an extensive monitoring plan, Mr. Kelly was able to perform a site closure for these spills and obtained a "No Further Action". He also performed an emergency assessment due to the discovery of an unknown acid reduction vault at the FDLE Forensics Laboratory in Orlando. Through assessment and monitoring activities, a "No Further Action" was also obtained for this facility.

Florida Department of Environmental Protection (FDEP) Preapproval Cleanup Program

Since 1995, Mr. Kelly has served at JSA as a project manager for the assessment and remediation of numerous petroleum contaminated sites through the FDEP Preapproval Program. He also has served as a project manager for over 30 FDEP Preapproval Cleanup sites. Mr. Kelly has obtained Site Rehabilitation Completion Orders (SRCO) for over 10 FDEP Preapproval Cleanup sites. Mr. Kelly has experience and knowledge of the FDEP's Preapproval Program and has a good working relationship with the FDEP regulators in the FDEP Main Office (Tallahassee), the Northeast FDEP District (Jacksonville), the FDEP Northwest District (Pensacola), the FDEP Central District (Orlando), the Southwest FDEP District (Tampa), and with several State of Florida County FDEP Agencies. Mr. Kelly frequently attends FDEP sponsored contamination assessment and remediation workshops to stay current on the FDEP and Federal requirements.

FDEP Preapproval Cleanup Program: Quincy Farms Site; Quincy, Florida

Among the numerous FDEP Preapproval Cleanup sites that Mr. Kelly has managed, the Quincy Farms facility was an extensive and notable site. In the late 1990's, Mr. Kelly directed the assessment of a petroleum release from a UST at the Quincy Farms site (a large mushroom production and packing facility). In 1999, a large source removal was planned and directed by Mr. Kelly, which resulted in the removal

Rick Kelly, P.G. (Cont.)

and proper disposal of over 900 tons of petroleum contaminated soil. Upon the completion of source removal, Mr. Kelly designed and installed a Bio Air Sparge System to cleanup the groundwater. This system was operated for a 1-year period until the groundwater was remediated. The site was then placed into a 1-year post remediation sampling plan that revealed the groundwater was successfully remediated. The site was issued a Site Rehabilitation Completion Order (SRCO) in 2006.

Sarasota County Government; Sarasota, Florida

Since 1998, Mr. Kelly has developed and maintained a professional relationship with officials from the Sarasota County Government. This relationship resulted in the selection of JSA to perform the assessment and remediation of all Sarasota County petroleum storage facilities. Mr. Kelly has directed and performed the removal of underground storage tanks at several of the Sarasota County facilities, including the Sarasota County Courthouse, the Criminal Justice facility, the Central Energy Plant, the County Jail, and the County Health Department. Mr. Kelly performed and directed contamination assessments and remediation activities at the Historical Sarasota County Courthouse and the Sarasota County Jail sites. Site Rehabilitation Completion Orders were obtained for both sites. Mr. Kelly was responsible for placing 5 Sarasota County sites into the FDEP Preapproval Program. Mr. Kelly is currently directing a Monitoring Only Plan (MOP) at one of these facilities (the Sarasota County Area Transit), while the remaining 4 sites are awaiting FDEP funding. Mr. Kelly was also involved in the construction design and project management for the installation of 4 aboveground storage tanks for the Sarasota County Government.

Tallahassee Memorial Hospital; Tallahassee, Florida

Since 1998, Mr. Kelly has served as JSA's project manager for the assessment and remediation of all of the petroleum facilities at the Tallahassee Memorial Hospital. Mr. Kelly was responsible for the assessment of a petroleum release associated with two 20,000 gallon diesel USTs that supplied emergency power for the TMH Power Plant. Mr. Kelly obtained a conditional SRCO for this release. In 2001 and 2002, Mr. Kelly directed the removal of these USTs to facilitate the construction of the new Bixler Emergency Wing. Mr. Kelly also served as a consultant to the TMH Engineering Division concerning the installation of two 15,000 aboveground storage tanks for the emergency operations of the TMH Power Plant. He performed contamination assessments for the emergency room site and the Psychiatric Facility. Both of these sites received SRCO's from the FDEP. Mr. Kelly has also responded to 2 emergency responses of petroleum releases at the TMH facility.

Citizen's Bank of Perry; Perry, Florida

Mr. Kelly was responsible for the contamination assessment and remediation of a tetrachloroethene (PCE) plume at the current property of the Citizen's Bank of Perry in Perry, Florida. In 1998 and 1999, Mr. Kelly directed and performed a large site assessment to delineate this PCE plume. In 1999 and 2000, Mr. Kelly designed and installed an air sparge/vapor extraction system to remediate this plume. Mr. Kelly was able to reduce the PCE plume to concentrations low enough to facilitate the

Rick Kelly, P.G. (Cont.)

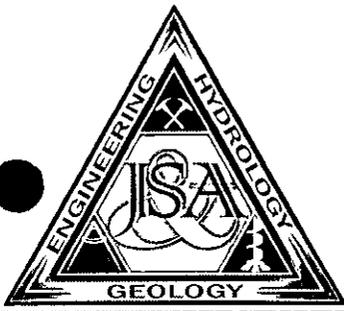
construction of the current bank building. Mr. Kelly placed the facility into a monitoring plan and was able to obtain a conditional closure for this site from the FDEP Northeast District.

JSA's Drilling Division; Tallahassee, Florida

Prior to 1997, all drilling services for the site assessment and remediation activities for JSA were performed by subcontractor drilling services. As Mr. Kelly had extensive experience in the drilling field, he coordinated and created JSA's In House Drilling Division. Since 1998, JSA's In House Drilling Division has expanded to include 2 drill rigs (a Failing F-7, capable of installing monitor wells and water wells to depths of 1000 feet, and a Mobil B61HD, for shallow [<150 feet] monitor well installation). In 2000, Mr. Kelly also expanded JSA's drilling services to include direct push technology (DPT) drilling services by including an AMS 9600 PRO Series DPT rig. Other drilling equipment includes two DSI Grouters for well abandonments, 3 support trucks and 4 support trailers, steam cleaners, and extensive construction equipment (cut saws, core machines, jack hammers, etc.). JSA's Drilling Division includes 6 State of Florida Licensed Water Well Contractors and an experienced support staff. Also in 2000, Mr. Kelly expanded JSA's Drilling Division to provide drilling services for outside clients. JSA's Drilling Division Client list includes several prominent consulting firms such as: Levine Fricke, WRS, Black & Veatch-Special Projects, Fortis Environmental, Dick Environmental Services, Enviro-Logical Solutions, and several state agencies, such as: the Florida Department of Environmental Protection, the Florida Department of Agriculture, the Florida Department of Corrections, and the Florida Department of Management Services.

SCOTT SIGLER, M.S., P.G.

Senior Geologist / Hydrologist



EDUCATION

M.S., Chemical Oceanography,
Florida State University

B.S., Geology, Florida State
University

A.A., Business Studies,
St. Petersburg College

MEMBERSHIPS

American Institute of Professional
Geologists

National Groundwater Association

Geological Society of America

TRAINING/OTHER QUALIFICATIONS

Professional Geologist in the State
of Florida. P.G. #2471

38 Hour ACoE Wetlands
Delineation & Management
Certified

16 Hour Florida Statewide (62-
340) Wetland Delineation
Training

40 Hour Hazardous Waste Site
Safety Training meeting the
requirements of 29 CFR
1910.120

USCG Small Craft Operation and
Navigation Certificate.

Mr. Sigler has over 13 years experience in water quality programs including the coordination and design of investigative research, sampling strategies, supervising field collections, data analysis, interpretation and report preparation. Currently supervising programs to determine geologic and hydro-chemical profiles of ground and surface waters, he is also a consultant in the development of research models, environmental permitting, and site assessment. Primary responsibilities at Jim Stidham & Associates, Inc. include Project Management, evaluating data collection methods to be employed in research projects, oversight of field collections, hydrologic profiling, sample analysis, and the synthesis of data derived from field surveys. Mr. Sigler has also been trained in wetlands delineation and heads the wetlands program at JSA. Prior to employment with JSA, Mr. Sigler was an integral member of the Operations team that opened Disney's Animal Kingdom theme park at Walt Disney World. In that role Mr. Sigler established the standard operating procedures and water quality standards for care of the multiple aquatic features present within the park. Mr. Sigler has consulted on water quality issues for marine and fresh water fish, marine mammals, aquaculture, recreational attractions and bottled water.

Project Highlights:

Unpermitted Regulated Waste Site: Site Assessment Investigation / Waste Clean Up Performed in response to Consent Order by the Florida Department of Environmental Protection (FDEP) in accordance with 62-780.600 F.A.C. The purpose of the SAR was to assess the type and extent of un-permitted waste deposited as fill material within a Sand Borrow Pit, investigate possible environmental hazards from chemical discharge in soil, sediment, surface water and groundwater, potential receptors of their migration, and support of proposed courses of action at an active mining facility in Leon County, Florida. Subsequently, a Waste Removal Plan has been submitted for approval following Consent Final Judgment with FDEP.

Ace Salvage: Site Assessment Report Performed in response to Consent Order by the Florida Department of Environmental Protection (FDEP) in accordance with 62-780.600 F.A.C. The purpose of the SAR was to investigate possible environmental hazards from petroleum releases caused by improper storage and handling of fluids associated with car crushing and recycling at a metal recycling facility in Gadsden County, FL. Research examined discharge in soil, sediment, surface water and groundwater, potential receptors of their migration, and support of proposed courses of action at an facility. An interim source removal has been performed. Site Assessment is ongoing.

Chattahoochee Landfill: Site Assessment Report Submitted pursuant to a request by the Florida Department of Environmental Protection (FDEP) in accordance with 62-780.600 F.A.C. The purpose of the SAR is to assess the type and extent of contaminants within the various media present at the site, their source, potential receptors of their migration, and support of proposed courses of action at a closed Class II Sanitary Landfill near Chattahoochee, Gadsden County.

Unpermitted Regulated Waste Site: Waste Clean Up Performed in response to Consent Order by the Florida Department of Environmental Protection (FDEP) in accordance with 62-701 F.A.C. The purpose of the waste cleanup project was to remove regulated household wastes from a sensitive ecological steep-head wetland along the Apalachicola River in Gadsden County. Permits for Wetland impacts were sought and approved by FDEP and U.S. Army Corps of Engineers. 892 Total tons requiring 85 truck loads were removed during the three week excavation. Waste from the site was distributed to appropriate receiving facilities at Decatur County Landfill in Bainbridge, GA, and Liberty County Landfill in Florida. Three loads of tires, weighing 18 tons, were recycled at Barber Fertilizer Company of Bainbridge, Georgia. Wetland disturbance was less than proposed.

Ridge Citrus Fertilization Best Management Practice Verification Study This project, funded by the Florida Department of Environmental Protection (FDEP), is being conducted in coordination with the Florida Department of Agriculture and Consumer Services (DACS) and the University of Florida's Institute of Food and Agricultural Sciences (IFAS). JSA was selected to provide the preliminary field reconnaissance for site selections, installation of new monitor well technologies, nested well placement, and quarterly collection of groundwater samples. Mr. Sigler generated the Quality Assurance Project Plan and serves as the JSA Project Manager overseeing the field processes of site selection, well installation, sample collection, data acquisition and the submission of deliverables to the participating agencies.

Freshwater Springs Hydrology and Geochemical Character Determination: Assisting with prospecting efforts and regulatory documentation, Scott regularly provides consultation for local and national entities on springs classification, potentiometric surface mapping, Semi-annual hydrology and consumption logs for District agencies, and meeting the requirements for bottled water standards per 21 CFR 165.110.

Surface and Groundwater Interaction Investigation: Lake Lochloosa and Orange Lake – This study, performed under direction from the Florida Department of Management Services (DMS) and FDEP, examined the groundwater pathway as a conveyance for enriching nutrients and evaluated how natural nutrient levels in the aquifer matrix, and anthropogenic sources such as septic tanks, may be related to nutrient loading within the Orange Lake basin. The work completed during the study involved the identification of current and historic land uses for qualification of loading types, examination of soil lithology and surficial aquifer units throughout the region by Direct Push Techniques (DPT), and the collection of representative soil and groundwater samples for laboratory analysis. Mr. Sigler generated the Quality Assurance Project Plan and served as the JSA Project Manager overseeing the processes of authorized access to public and private land, geological site characterization, sample collection, data acquisition and the submission of deliverables to the participating agencies.

Multi-well Aquifer Test and Geophysical Well Inspection – A Hydrogeological investigation was conducted for a growing coastal development community in the Florida panhandle. The objective of the investigation was to improve the knowledge of the Shallow and Intermediate aquifers, particularly with respect to the degree of hydraulic interaction between the two aquifers and the potential for impacts to area wetlands as a result of authorized withdrawals. Geophysical logs of natural gamma radiation were recorded to determine depth and thickness data of the aquifers and confining beds. Separate pumping tests were performed to determine horizontal conductivity of the two aquifers. Mr. Sigler served as the JSA Project Manager interacting with government agencies, overseeing piezometer installation, pumping test and data acquisition and the submission of deliverables to the participating agencies on behalf of the client.

Hydrogeological Investigation: Pumping Test and Spring Adjacency – A geologic investigation, characterizing the hydrogeologic, chemical and physical properties of a Florida panhandle spring and its associated source aquifer, was conducted on behalf of Nestle Waters of North America. The work consisted of conducting multiple soil borings by DPT to identify water bearing formations and confining strata, the installation of piezometers throughout the basin, construction of a pumping well, development of a static weir at the spring head and performing a pumping test. Water samples were also collected from the spring and aquifer for

comparison of chemical characteristics. The goal of the study was to improve the knowledge of the spring and aquifer, particularly with respect to the degree of hydraulic connectivity between them. Mr. Sigler served as the JSA Project Manager overseeing the field processes of lithologic description, piezometer installation, sample collection, pumping test and data acquisition and the submission of deliverables to the client.

Regulatory Groundwater Observation and Compliance Monitoring – Mr. Sigler has a thorough working knowledge of the state regulations for groundwater monitoring of Landfills, Waste Water Treatment, and agricultural Best Management Practices (BMPs). He coordinates schedules and manages events supporting Discharge Monitoring Reports for waste water treatment facilities, semi-annual reporting for Landfills and compliance monitoring for land development. Through this experience he has developed an excellent rapport and working relationship with FDEP, DACS, Water Management Districts and Local Government agencies throughout Florida. JSA conforms to the Florida Department of Environmental Protection's (FDEP) Comprehensive Quality Assurance Plans (CompQAP) standard operating procedures for reporting and analysis.

Wetland Impact Permitting – Following the landfall of Hurricane Ivan, near the border of Florida and Alabama, the coastal development project of Trustmark South, in Gulf Shores, Alabama was significantly impaired by storm deposits and environmental damages. Mr. Sigler was able to coordinate with Army Corps of Engineers staff and the Alabama Department of Environmental Management to obtain a Nationwide Permit and mitigation credits for unavoidable wetland impacts allowing clean-up and development to resume.

In a separate project in the Florida panhandle it was determined that significant excavation would be necessary to remediate illegal dumping in a timber forest near Chattahoochee, FL. Mr. Sigler successfully negotiated FDEP wetlands permitting and Army Corps Nationwide Permits under a Joint Application for Work in the Waters of Florida on behalf of the client. This permit allowed limited impacts to wetland areas and the use of heavy machinery.

Florida Department of Environmental Protection-Preapproval Cleanup Program. Mr. Sigler has served at JSA as a project manager for the assessment and remediation of numerous petroleum contaminated sites through the FDEP Preapproval Program.

Hilltop Grocery Store: This former filling station was converted to a local grocery and deli after removal of gasoline UST's. The groundwater contamination plume at this site extended down gradient from the source area. Soil contamination extended off site and down to the water table at a depth of 50 feet. Investigation of the soils was conducted by Direct Push Techniques and continuous spooning by hollow stem auger. Five groundwater monitor wells were installed for determination of groundwater impacts and characteristics. A Template Site Assessment Report was generated as required by the FDEP work order.

The Pantry – Lake Jackson: This active filling station and convenience store reported leaking underground storage tanks and was accepted into state funded cleanup. Investigation of the soils determined that contamination was restricted to the site and contained in the vadose soils. Investigation of the soils was conducted by Direct Push Techniques. Six groundwater monitor wells were installed within and around the soil plume for determination of groundwater impacts and characteristics. A Template Site Assessment Report was generated for Southwest Georgia Oil Company, as required by the FDEP work order. A vapor extraction test is being developed for the site.

Wakulla County - Old Sheriff's Office: This former Sheriff's substation utilized a single underground tank and associated dispenser for fueling its fleet. Upon closure of the tank it was determined that an unknown volume of unleaded fuels had been released during its active use. A Limited Contamination Assessment Report has been provided to the state on behalf of Wakulla County. Investigation of the soils was conducted by Direct Push Techniques and continuous spooning by hollow stem auger. Seven water table wells and a deep groundwater monitor well were installed for determination of groundwater impacts and characteristics. The site has been accepted into the PCPP following this investigation.

Aquatic Life Support Operations – As an Operations Manager with the Walt Disney World Company Mr. Sigler was responsible for developing, implementing and supervising the daily operation of water treatment systems, field sample collections, laboratory analysis, and report generation for aquatic environments within Animal Programs. His further responsibilities included acting as the chemical safety officer, a hazardous materials response team member, the development of chemical hygiene plans, operational guideline documents, and consulting on corporate policy regarding water use in recreation, animal husbandry, discharge, and conservation.

Nutrient Analysis of Apalachicola Bay – This research project was directed at monitoring anthropogenic effects on nutrient mass balance in and around the Apalachicola Bay and river estuary. Monthly sample events were conducted to examine water column profiles for major nutrients, clarity, in-situ baseline parameters, sunlight intensity, salinity, and phytoplankton productivity. Mr. Sigler served in this project as a logistics coordinator, field participant and data QAQC reviewer.

Florida Aquatic Ecosystem Mercury Cycling & Modeling Project – During this intensive field and laboratory research examining the pathways of heavy metal contamination in a limnologic ecosystem Mr. Sigler was a project manager. Mr. Sigler coordinated field activities, supervised the scientific SCUBA team, coordinated sampling logistics, reviewed data QAQC, and generated deliverables to the funding agencies. The project investigated water column and pore water profiles, sediment accumulation rates, and benthic flux. Groundwater and sediment geochemistry were analyzed to develop a history of mercury deposition to lake sediments.

Employment:

Jim Stidham & Associates, Inc., Tallahassee, Florida, Senior Geologist.	June 2004 – present
Walt Disney World Co. Disney's Animal Kingdom., Orlando, Florida, Aquatic Chemist.	Dec 1997 – June 2004
The Florida State University, Department of Oceanography, Graduate Research Asst.	Jan. 1994 – Dec. 1997



WILLIAM G. ROLLINS, P.G. Hydrogeology/Environmental President

EDUCATION

Masters Studies, Florida State
University
B.S., Geology, Columbus State
University

CERTIFICATIONS

Licensed Professional Geologist,
States of Alabama, Florida,
and Georgia
Licensed Water Well Contractor,
State of Florida
Licensed Real Estate Sales
Associate, State of Florida

TRAINING/OTHER QUALIFICATIONS

Forty Hour Hazardous Waste Site
Safety training meeting
requirements of 29 CFR
1910.120,
Current 8 hour refresher

University of North Florida
Environmental Assessment
Training Course.

University of Florida, Computer
Model Training
(MODFLOW)

NGWA PEST Model Calibration
Training

NGWA The MODFLOW Course

NGWA Visual MODFLOW
Advanced Training

EMPLOYMENT HISTORY

Jim Stidham & Associates, Inc.
1985-Present

With over 25 years of work experience at Jim Stidham & Associates, Inc., Mr. Rollins has completed projects throughout the Southeastern United States and Bahamas. Mr. Rollins has been directing hydrogeological investigations in Florida, Georgia, Alabama, and Mississippi since 1985. Primary responsibilities at Jim Stidham & Associates, Inc. include hydrogeologic assessments (including multi-well aquifer testing, saltwater upconing modeling, single well aquifer tests, and the securing of consumptive use permits for water wells), groundwater contamination studies, Phase I and Phase II Environmental Assessments, computer modeling of groundwater and contaminant transport, and remedial action studies. Investigation sites include projects across central and north Florida, Georgia, Alabama, and Mississippi. His primary duties include project management, site investigation, quality assurance/quality control, computer modeling, data analysis, and report writing.

St. James Bay, Franklin County, Florida. For this large development, which included an 18 hole golf course, Mr. Rollins was responsible for determining consumptive use impacts to the Floridan Aquifer from the development of potable use supply wells and also the consumptive use impacts resulting from the use of surface water sources for irrigation of the proposed golf course. This work included multi-well aquifer testing and analysis to determine hydrogeologic parameters of the aquifers. This data was used for model input for Visual Modflow which was then calibrated to predict aquifer impacts and saline intrusion potential of the Floridan Aquifer and nearby users. Project tasks included analysis of previously performed multi-well aquifer tests, saltwater interface wells, wetlands monitoring, short-term/long-term pump tests, step pump tests, groundwater modeling, data analysis, and water quality analysis. The final permit provided sufficient resources for the client with minimal impact to the environment.

Northwest Florida Water Management District, Tate's Hell Floridan Aquifer Study. This work consisted of a multi-year study of the groundwater resources of the Tate's Hell Wildlife Management Area of Franklin County, Florida. Work consisted of coordinating with District personnel in development of an exploration program, development of well construction specifications for a multi-well aquifer testing program, coordination with well drillers, oversight of well construction, chemical and physical data collection, short term pump testing, oversight of well development/geophysical logging/well completion, performance of 8 to 72 hour pumping tests including use of automatic data loggers, and coordination with District personnel in data interpretation. Tasks completed as a part of this project included specific capacity tests, groundwater sampling, saltwater interface wells, and aquifer performance testing.

William G. Rollins, P.G. (Cont.)

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Private Client, St. James Island Hydrogeology Study, Franklin County, Florida. Mr. Rollins led the JSA team to help develop an aquifer resource investigation plan in order to assess the water resources of St. James Island. The purpose of this work plan was to perform a detailed research of available hydrogeological data, review this data, and provide a program for acquiring additional hydrogeological data across St. James Island in order to determine the available water resource potential of the island.

The initial part of this study consisted of a historical research of Franklin County hydrogeology and identified a total of four Aquifer Performance Tests which have been performed within St. James Island. These comprehensive tests provide the most detailed aquifer information for this region including aquifer production information, local lithology, and in some cases, depth to the salt water interface. As a part of this project, local and regional historical work was researched, categorized, and plotted using a geographical information system to identify existing well locations and available chemical data (chlorides).

An aquifer investigation program was developed for the Floridan and Surficial Aquifers. This proposed program consisted of a series of aquifer performance tests, geophysical logging, chemical testing, and saltwater interface determination borings..

Well Field Development, East Point Water and Sewer District, Florida. For the Eastpoint Water & Sewer District, Mr. Rollins provided well construction oversight and testing of the Floridan Aquifer north of Highway 98 in western Franklin County. This testing, and the associated data analysis, is part of the expansion of the existing well field for the Water District. The initial work consisted of the installation of a saltwater interface well, a Floridan aquifer test well, Floridan aquifer observation wells, installation of a surficial aquifer well, along with performance of a 72 hour aquifer pump test.

Model development and resource analysis will be focused towards satisfying the requirements for the consumptive use permit application process as specified by the Northwest Florida Water Management District (NFWFMD)..

Well Specification and Construction Oversight/Aquifer Testing/ Consumptive Use Permitting for Florida Agricultural and Mechanical University, Tallahassee, Florida. Since the 1990's, Mr. Rollins has directed the well construction oversight, water quality sampling, and consumptive use permitting for the supply and return wells withdrawing water from the Floridan Aquifer.

Florida A&M University utilizes groundwater sources as a cooling exchange media in order to cool and dehumidify campus facilities. The most recent CUP application requested an average daily amount of 19.4 MGD, a maximum daily withdrawal amount of 27.MGD, and maximum monthly withdrawal amount of 725 million gallons per month. Water is supplied from the highly productive Floridan Aquifer located in Leon County Florida..

03/16/11

William G. Rollins, P.G. (Cont.)

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Franklin County Floridan Aquifer Evaluation Study, Florida. For the Northwest Florida Water Management District, (NFWFMD), Mr. Rollins was the lead Hydrogeologist retained to provide professional oversight of all planned drilling activities as well as coordination with the Northwest Florida Water Management District (NFWFMD), Department of Agriculture (DACS - Division of Forestry), and the selected well drilling firm. Work was performed at four sites with work consisting of completing well specifications, assist in the bidding process, construction oversight of production and monitoring wells, oversight and water quality testing during construction of a saltwater interface well, and completion of 48 to 72-hour multi-well aquifer tests.

Remote Wellfield Development, City of Quincy, Florida. Mr. Rollins led Jim Stidham & Associates, Inc. (JSA) in cooperation with a was retained by William Bishop Engineering and the City of Quincy to oversee production and monitoring well construction and to perform testing on the Floridan Aquifer in the vicinity of Chattahoochee, Florida. The testing and data analysis was part of the initial stages of the development of a remote well field for the City of Quincy, Gadsden County, Florida. This work consisted of the installation of a Floridan Aquifer test and Floridan Aquifer observation wells, along with performance and analysis of a 72 hour aquifer pump test.

The goal of this phase of testing was to determine site specific hydrogeologic characteristics in the vicinity of the City of Quincy Remote Well Field. Ultimately, data derived from this testing was used to determine the potential impact a new well field may have on permitted and non-permitted users of groundwater within the Floridan Aquifer in the Chattahoochee area. The test well and pump test was completed and work resulted in successful completion and approval of a Consumptive Use Permit from the Northwest Florida Water Management District.

Construction and Demolition Landfill Permitting, Leon County, Florida. Mr. Rollins led the permitting program for two Construction and Demolition (C&D) facilities located in Leon County Florida. Work consisted of hydrogeological studies, well construction, water quality sampling and analysis, area studies, well searches, and successful completion of a State of Florida C&D Permit application for the two facilities. He oversaw the installation of over 25 wells and soil borings in order to provide a geological understanding of the sites upon which he developed groundwater monitoring plans which met the requirements of the Florida Department of Environmental Protection.

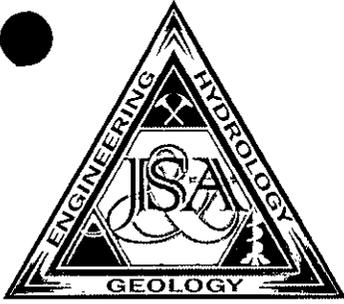
Citrus Grove BMP Confirmation Study Sebring/Avon Park Area, Florida. For this work, Mr. Rollins coordinated with the Florida Department of Environmental Protection, Department of Agriculture, and Citrus Farmers to view the project sites, identify well locations, install monitoring wells, and monitor these wells to confirm Best Management Practice (BMPs) in reduction of nitrates within the surficial aquifer. After receipt of Citrus Canker Hygiene training, Mr. Rollins directed the

William G. Rollins, P.G. (Cont.)

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installation of 5 - multilevel monitoring wells at nine different monitoring sites. The majority of sites utilized Continuous Multichannel Tubing (CMT) Wells, each with seven sampling ports. Upon completion of the wells, sites were interred into a quarterly sampling program in order measure the effectiveness of BMP compliance to bring nitrate values below State action levels.

Landfill Compliance, Board of County Commissioners, Gadsden County, Florida. For the past ten years, Mr. Rollins has worked with the Gadsden County Board of Commissioners through the County Road Department, to perform all compliance issues related to abandoned landfill sites in East Gadsden County and near Chattahoochee. This work consists of permit renewals, review of quarterly sampling reports, completion of biannual reports, groundwater flow analysis, well rehabilitation, new well construction, geo-hydrological analysis of proper well placement, and response to the Florida Department of Environmental Protection.



Anthony M. Holley, E.I.

CIVIL ENGINEER

Mr. Holley has over 5 years of experience in Civil Engineering providing support and design for stormwater and wastewater/water areas of study. He assists in the design of and upgrades to wastewater/water treatment plants. He is also responsible for obtaining permit renewals for both wastewater and water treatment plant operations. He is proficient in AutoCAD Civil 3D.

Spill Prevention, Control & Countermeasure (SPCC) Plan for Tallahassee Memorial HealthCare; Tallahassee, Florida

The SPCC Plan for Tallahassee Memorial HealthCare (TMH) was made to meet the condition set in place by EPA under 40 CFR Part 112. TMH has a total of six tanks ranging from 550 gallon to 15,000 gallons in four separate locations. One year after the initial Plan was implemented TMH added two more tanks to their facility. This required the SPCC Plan to be revised for additional tanks.

Aeon Church C&D Landfill Permit Renewal; Tallahassee, Florida

The Aeon Church Permit Renewal included designing a grading plan that would better suit stormwater runoff in the event of closure. Writing the permit and completing the packet supplied by Florida Department of Environmental Protection was also a major part of the project.

Mayo Correctional Facility Water System Upgrade; Lafayette, Florida

The Mayo Correctional Facility Water System Upgrade consisted of adding an air diffused blower system to replace the existing cascade aerator already in service. Mr. Holley provided engineering design and support through-out the design process of this project.

Lancaster Correctional Facility Water Treatment Plant; Trenton, Florida

The Lancaster Correctional Facility Water Treatment Plant was an upgrade from an existing system consisting of a hydropneumatic tank and chlorination system. The upgraded plant incorporated a new larger hydropneumatic tank, above ground storage tank, gas chlorination system, and high service booster pumps to provide both clean drinking water and fire flow protection to the correctional facility. Mr. Holley provided engineering design and support for the upgraded plant including initial design, submittals and RFIs. He also acted as CAD supervisor for the plans development.

Alachua County Wastewater Treatment Plant Upgrades; Alachua County, Florida

The Alachua County WWTP was an upgrade to mirror the existing equipment to increase the treatment capabilities of the plant. Mr. Holley provided engineering support for the construction and submittal process during all phases of construction. This support included CAD support and approval of submittals and RFIs as they came in from the construction management firm.

EDUCATION

B.S., Civil Engineering;
Florida State University

CERTIFICATIONS

Registered Engineer Intern;
Florida Board of
Professional Engineers

TRAINING/OTHER QUALIFICATIONS

40-Hour Hazardous Waste Site
Safety Training to meet the
requirements of 29 CFR
1910.120, Current 8-Hour
Refresher

Employment

Jim Stidham & Associates, Inc.
Staff Engineer,
2005 – Present

Anthony M. Holley (Cont.)

Live Oak Wastewater Treatment Plant Upgrades; Live Oak, Florida

The Live Oak WWTP was an upgrade from 1.25 million gallons per day (MGD) treatment plant to a 3.0 MGD treatment plant. Mr. Holley provided engineering and CAD support for the design process of the upgrade along with support in approving submittals from the on-site contractors. The design included new components to mirror those already existing, along with additional ones to compensate for the increase in size.

Columbia County Wastewater Treatment Plant; Lake City, Florida

Mr. Holley provided engineering support for the design of a new WWTP to service a developing area in Columbia County, FL. The WWTP is a 0.160 MGD plant consisting of Sequencing Batch Reactors. The plant also included the design of a 22-acre spray field.

Golden Eagle Drainage Study; Tallahassee, Florida

Mr. Holley provided support for a drainage study for the Golden Eagle Homeowners Association. Designed a proposed stormwater solution that revolved around incorporating a 40.62-acre drainage basin into a golf course fairway, which was to be kept undisturbed.



DAN LITTERAL, P.G.
SENIOR GEOLOGIST

Mr. Litteral, with over 18 years experience, serves as a project manager responsible for supervising and coordinating contamination assessment activities including general field activities. These activities include: soil, water, and air sampling projects; supervising the installation of monitoring wells and soil borings; and report preparation, including test analysis, groundwater flow analysis, and figures. He performs groundwater modeling to help determine the most effective remediation system and prepares remedial action reports. Mr. Litteral also performs Phase I and Phase II Environmental Site Assessments and produces the corresponding reports.

Lynn's Country Store; Havana, Florida

This project consisted of completing an extensive evaluation of a site where petroleum products had impacted soil and groundwater. Three separate hydrostratigraphic zones were impacted: Surficial, Intermediate and Floridan Aquifers, as well as potential surface water. All zones were fully characterized and assessed. A Remedial Action Plan (RAP) was prepared, in which the contaminated media was addressed. Soil was treated via Soil Vapor Extraction (SVE), while the surficial aquifer was treated through Air Sparge (AS). Due to high water table fluctuations, the Surficial had to be drawn down through a pumping system. Contamination in the Intermediate aquifer was also addressed through pumping from two recovery wells. An Air Stripper was utilized to treat groundwater pumped from the Surficial and Intermediate zone; treated water was then returned to the surficial aquifer through an injection well. A downgradient curtain of oxygen release compound, injected into the Surficial aquifer, was used to help prevent migration of the plume into a nearby surface water body.

Bay County Jail; Panama City, Florida

Mr. Litteral conducted an evaluation of the Bay County Jail facility, which had been impacted by a petroleum release from an AST and chlorinated solvents issuing from releases near the maintenance shop. Surficial and intermediate zone aquifers were impacted. Off site sources appeared to be contributing to the extensive petroleum plume below the site, and assessment included evaluation of potential off site sources. The site is located on an inlet from the Gulf of Mexico, requiring the use of stricter marine criteria for groundwater contaminant thresholds. Additional investigations in the stormwater system and the adjacent bayou were required. Due to logistical constraints, a mechanical remediation system could not be utilized. A bioremediation treatment was designed and implemented at the site. Petrophilic bacteria was injected in multiple injection wells across the site into the upper and lower surficial aquifer, and into the intermediate zone.

Rock Hill Aquifer Study; DeFuniak Springs, Florida

Mr. Litteral performed a study of the groundwater resources of the Rock Hill Water System in DeFuniak Springs, Florida. Work consisted of development of well construction specifications for a multi-well aquifer testing program, coordination with well drillers, oversight of well construction, chemical and physical data collection, short term pump testing, oversight of well development/geophysical

EDUCATION

Masters Studies;
Florida State University

B.S., Geology & Archeology;
Wheaton College

CERTIFICATIONS

Licensed Professional Geologist;
State of Florida

**TRAINING/OTHER
QUALIFICATIONS**

40- Hour Hazardous Waste Site
Safety Training to meet the
requirements of 29 CFR
1910.120, Current 8-Hour
Refresher

Dan Litteral, P.G. (Cont.)

logging/well completion, and performance of 8 to 72-hour pumping tests, including use of automatic data loggers. Tasks completed as a part of this project included specific capacity tests, groundwater sampling, and aquifer performance testing.

Whitaker Oil Facility; Panama City, Florida

Mr. Litteral conducted an assessment at the former Whitaker Oil facility in Panama City, Florida. The site is currently being utilized as a ship manufacturing facility, but historically the site was a petroleum bulk storage facility. As part of the assessment process, several contamination plumes were identified and fully defined. As the site had at one time maintained numerous large ASTs containing petroleum, acid and acetone products, there were several plumes with different chemicals of concern (COC) to evaluate. The plumes were defined to the greatest practical extent, including investigation of sediments in the adjacent bayou. Pilot testing was performed to evaluate the most effective treatment options for the site. A remedial action plan (RAP) is being prepared in which a system of air sparge wells is being proposed for treatment of groundwater contamination, with an associated vapor extraction system to collect volatiles associated with groundwater treatment and to remove petroleum vapors from the vadose zone.

3. RESUMES OF OUTSIDE CONSULTANTS

JSA will use the following outside consultant for projects that may be acquired from this contract.

Chen H. Lin, P.E. Ph. D.

JSA has attached on the following pages the resume of this consultant.

CHEN H. LIN, P.E., Ph.D. Civil/ Environmental Engineer

EDUCATION

Ph.D., Environmental
Engineering Sciences,
University of Florida
M.S., Civil Engineering,
Auburn University
B.S., Civil Engineering, Cheng-
Kung University, Taiwan

CERTIFICATIONS

Licensed Professional Engineer,
States of Alabama,
Florida, Michigan, and
South Carolina
Registered Professional
Engineer, Taiwan

OTHER LANGUAGES

Chinese (Mandarin): fluent in
speaking, reading, and
writing
Taiwanese: fluent in speaking,
reading, and writing
Japanese: basic speaking and
reading

EMPLOYMENT

Self Employed
2011 – Present

Jim Stidham & Associates, Inc.
Professional Engineer
2005 - 2011

Ecology & Environmental, Inc.
S.E. Regional Engineering
Manger
1988 - 2005

With 33 years' experience, Dr. Lin has completed projects throughout the United States, Asia, and South America encompassing industrial and domestic water and wastewater treatment system design, bench- and pilot-scale treatability studies, Title V air permitting, water resource conservation, reclaimed water reuse, soil and groundwater remediation, solid and hazardous waste management, and environmental impact assessment. For international clients, he has managed large-scale, water and wastewater treatment systems and solid waste management infrastructure development projects funded by World Bank or Asian Development Bank (ADB). He is also a consultant to ADB and Florida Board of Professional Engineers.

Project Highlights:

Compliance and Permitting:

Confidential Client, Perry, Florida. Dr. Lin has been the consultant to this defense contractor for over 15 years. He provides technical supports in engineering as well as environmental compliance. He serves as the liaison in dealing with FDEP in securing all of the client's environmental permits related to its various explosives manufacturing and waste treatment operations, including the RCRA hazardous waste treatment facility operation permit; facility-wide Title V air permit; electroplating industrial wastewater treatment plant operation permit, and the water supply system compliance. He has successfully reduced the amount of the RCRA permit financial assurance by over 50% and recently secured the USEPA approval for an alternative mercury monitoring plan (a variance to 40CFR, Part 61, Subpart E) for the client's sludge dryer operations. He also generates annual reports for the Title V air permits; supported the client's RCRA permit modification efforts to add new products; directed the assessments, corrective measure implementation, and closure of over 15 solid waste management units; reviews the results of routine soil and groundwater monitoring; and serves as the client's liaison with regulatory agencies.

Groundwater Remediation Design and Title V Air Permit Maintenance, Quincy, IL. For Harris Corporation Dr. Lin designed and managed the annual inspection of a groundwater treatment system at its Quincy, IL telecommunication equipment manufacturing facility. He also assisted in the application, renewal and annual reporting for the client's Title V Air operating permit. At Harris' overseas manufacturing facilities in Shenzhen and Guangzhon, China, He supported the environmental programs manager during the client's on-site corporate health and safety surveys. He used his understanding of Chinese regulations and extensive experience in both China and the United States to help ensure that the client's survey was both comprehensive and complete. Most importantly, Dr. Lin helped identify several potential engineering design problems concerning the facility waste management and treatment systems.

Chen H. Lin, P.E., Ph.D. (Cont.)

Wastewater Treatment:

Talquin Electric Killearn Lakes WWTP, Tallahassee, Florida. For TEC Dr. Lin evaluated the treatment processes, operation practices, and maintenance schedule of this activated sludge plant. As the engineer-of-record he prepared, and successfully secured the current FDEP permit. He identified sources of the influent strength fluctuation and the high sludge yield problems as well as other deficiencies and recommended corrective measures. He prepared bid packages and assisted TEC in contractor procurement for the recommended corrective measures. He also assisted TEC in proofing its sprayfield operations unrelated to the observed groundwater quality.

Talquin Electric Sandstone Ranch WWTP, Tallahassee, Florida. Dr. Lin evaluated the feasibility of upgrading the existing extended aeration activated sludge treatment plant at its current location and completed the preliminary design of a new Sequential Batch Reactor (SBR) process. As the engineer-of-record, he prepared the permit application and has successfully negotiated with FDEP for a set of reasonable effluent standards for the new plant. The FDEP has issued "intent to issue permit" and currently this permit is under public comment period. He is also assisting TEC in solving oil-and-grease problems in the lift station. Detail design of the new plant is ongoing.

Cape Canaveral and Patrick Air Force Bases, Cape Canaveral, Florida. Dr. Lin evaluated impacts of deluge water generated during rocket lunches to Cape Canaveral station's wastewater treatment plant and recommended a series of corrective measures. At this air force station and at Patrick Air Force Base, Dr. Lin was the engineer-in-charge for the stormwater management design and SPCC plans development related to the Clean Water Act compliance.

City of Live Oak WWTP, Live Oak, Florida. Dr. Lin is assisting the City of Live Oak in a complex permitting process similar to the City of Panama City. Under an FDEP consent order Live Oak's existing trickling filter plant was being upgraded to a Modified Ludzack-Ettinger (MLE) process with an upgraded capacity as well as higher effluent quality standards for public access reuse. As the engineer-of-record of the complex FDEP permit application combining renewal, capacity expansion, treatment process overhaul, and multiple effluent reuse mechanisms, he is the liaison for the City in working with FDEP on developing the new permit conditions. The FDEP has issued "intent to issue permit" and currently this permit is under public comment period. Dr. Lin also completed the NPDES permitting process for the WWTF and is assisting in the development of plans to replace the current sprayfield with public access reuse for the effluent disposal. He also evaluated the sludge digester and drying bed capacities and developed plans to integrate them into the new treatment process.

Columbia County WWTP, Ellisville, Florida. Dr. Lin is assisting Columbia County in the planning, design and permitting of its new WWTP at the intersection of I-75 and Highway 441. The impacts of a landfill leachate and the pretreatment standards, if needed, are being evaluated.

Chen H. Lin, P.E., Ph.D. (Cont.)

Talquin Electric Lake Jackson WWTP, Tallahassee, Florida. Dr. Lin assisted TEC in isolating causes of occasional unstable nitrate levels in this SBR plant effluent. He developed plans for investigating nitrate presence in the groundwater and is overseeing the implementation and progresses of the plans. He prepared an Agricultural Use Plan for this WWTP and secured the associated FDEP permit modification for the sludge management practice. He is preparing the construction plans and bid documents for a new sludge digester and a Rapid infiltration basin at this WWTF.

Talquin Electric Meadows WWTP, Tallahassee, Florida. For this advanced treatment SBR plant Dr. Lin developed the Capacity Analysis and the O&M Performance Reports in support of the FDEP permit renewal. The renewed operation permit for this WWTF has been issued without comments or Request for Additional Information (RAI).

Talquin Electric Oyster Bay WWTP, Shell Point, Florida. For this plant which is experiencing rapid growths in its service areas Dr. Lin developed the capacity expansion and treatment upgrade plans. He identified effluent disposal being the critical issue for this area and has evaluated options including public accessed reuse, additional infiltration basins, wetland disposal, and deep well injection. He also evaluated alternatives for TEC to integrate this plant into Wakulla County's new Otter Creek WWTP.

Industrial Wastewater Treatment Plant Evaluation and Water Reuse, Thorofare, NJ. For this commercial bearing manufacturing facility Dr. Lin evaluated causes of non-compliance for its industrial wastewater treatment effluent. He developed a wastewater minimization plan which included wastewater reuse as a key part for bringing the effluent quality to be in compliance of the permit criteria.

Industrial Wastewater Treatment Plant Evaluation and Permit Appeal, Henry, IL. For this Fortune 500 special chemical manufacturing facility Dr. Lin evaluated opportunities and options for wastewater effluent reuse at its combined domestic and industrial wastewater treatment plant. He also supported the client's endeavors in appealing to Illinois Pollution Control Board for the plant's ammonia effluent standard adjustments.

Precision Machine & Supply, Odessa, Texas. Dr. Lin completed an innovative groundwater reclamation project for the Texas Natural Resource Conservation Commission (now Texas Commission on Environmental Quality [TCEQ]). It involved a groundwater treatment system design using electrochemical precipitation technologies for chromium contamination at this former chrome plating facility. The system was successfully constructed and later operated by a third party.

Military Facilities. For the United States Air Force, he helped design and develop bid documents for groundwater extraction systems at Niagara Falls International Airport-Air Reserve Station. For the Southern Division of the Naval Facilities Engineering Command, he provided civil engineering support for contamination assessments and remedial activities at multiple hazardous waste sites at the Naval Air Station Pensacola. For the Jacksonville District of the United States Army Corps of

Chen H. Lin, P.E., Ph.D. (Cont.)

Engineers, he completed two design projects at Ramey Air Force Base, Puerto Rico. For Cape Canaveral Air Force Station Dr. Lin assisted in the management and treatment of the deluge water generated during rocket launches. Impacts of the deluge water to the station's wastewater treatment plant operations were evaluated and a series of responding measures were recommended. Impacts to the regional groundwater quality from the previous discharges of untreated deluge water were also evaluated. At this air force station and at Patrick Air Force Base, Dr. Lin was the engineer-in-charge for the storm water management design and SPCC plans development related to the Clean Water Act compliance.

Remediation:

Statewide Hazardous Waste Site/Dry-Cleaning Solvent Cleanup Program, Florida. For the Florida Department of Environmental Protection (FDEP), Dr. Lin was the lead program engineer for the remediation of denser-than-water nonaqueous phase liquid (DNAPL) contamination at sites throughout Florida. He works closely with FDEP project managers to manage engineering tasks using a steady, progressive approach to achieve State goals of expedited site cleanup and eventual closure. He managed the design, construction, and O&M of groundwater remediation systems at the Dryclean USA #11401 site in Boca Raton, One Hour Cleaners in Coral Springs, City Chemical site in Sanford, and over 10 other DNAPL-contaminated dry-cleaning sites in Palm Beach, Duval, and Broward counties. He also managed natural attenuation monitoring for 15 other sites contaminated with dry-cleaning solvents. Under Dr. Lin's management, five sites successfully met their cleanup goals within three years.

Statewide Assessment/Remediation Programs, South Carolina. For the South Carolina Department of Health and Environmental Control, he completed FSS and designed remedial systems for dry-cleaning sites including One Hour Martinizing in Darlington, Joye Dry Cleaning in Marion, and Colonial Cleaners in Denmark. The majority of One Hour Martinizing site has been remediated after the successful implementation of an in-situ oxidation injection as designed. He also managed FS for the Columbia Organic Chemical site, an industrial site in Cassatt where contaminants include heavy metals, volatile and semivolatile organics, PCBs, and dioxin.

Statewide Assessment/Cleanup of UST and Petroleum Sites, Florida. For FDEP, Dr. Lin developed remedial designs for soil and groundwater treatment at sites contaminated by gasoline UST leakage in Sparr, Ocala, New Hope, Sneads, Wacissa, and over 40 other locations. The remedial systems for over 30 sites were successfully constructed, commissioned, and operated under Dr. Lin's management.

Additional UST Sites, Texas, Alabama, Mississippi, and Florida. Dr. Lin developed remedial designs and oversaw remedial system construction and O&M for the Lakeport Kerr McGee site on behalf of the Texas Water Commission (now TCEQ); the Flomaton and Hamilton's Texaco sites for the Alabama Department of

Chen H. Lin, P.E., Ph.D. (Cont.)

Environmental Management; the Natchez site for the Mississippi Department of Environmental Quality; and sites in Miami, Dallas, and Houston for Ryder Truck Rental, Inc.

Water Supply:

Talquin Electric Cooperative, Inc. (TEC) Wakulla Public Water Supply System, Wakulla, Florida. TEC is a non-profit utility provider which owns and operates 18 public water supply systems in Wakulla, Leon, and Gadsden Counties. Wakulla Water System consists of three supply wells and serves coastal communities with a combined capacity of 2.4 MGD. As TEC's consultant, Dr. Lin has been assisting TEC in water quality evaluation, treatment feasibility study, design, permitting, and construction management services. In September 2007, in response to a sudden increase of iron and manganese concentrations in all three supply wells, he conducted a fast-track pilot study and the design of the treatment system, developed the preliminary engineering report (PER), and obtained FDEP construction permit. These actions successfully addressed FDEP's concerns. Concurrently Dr. Lin arranged a hydrogeological investigation which revealed that the iron and manganese concentrations were receding and that the plume was likely an isolated incident. Based on this information, Dr. Lin worked with FDEP NW District and revised the treatment design to a low-cost sequestering system. FDEP issued a general construction permit for the sequestering system. This system has been installed and placed in operation on an as-needed basis. As the engineer of record, he certified the as-built drawings and submitted the completion certification to FDEP.

In 2008 Wakulla Water System encountered elevated disinfection by-products (DBP) for which FDEP issued a consent order. Dr. Lin performed water quality evaluation and found discrepancies from the monitoring results reported to FDEP by the laboratory. He reviewed the laboratory protocols and proved that the high DBP levels were partially caused by improper lab practices. FDEP initiated its own investigation and confirmed this finding and consequently rescinded the consent order. In a rare occurrence, FDEP issued a letter complimenting this effort. Dr. Lin is also working with TEC operator on best management practices for chlorination dosage and residence time management by which DBPs have been kept in acceptable levels. However, in anticipation of the future Stage II DBP regulations, Dr. Lin has recently completed a treatability study using activated carbon adsorption and will be using the results in the design of a full-scale treatment system.

In September 2008 Wakulla Water System exceeded 75% of the permitted capacity. In response to FDEP request, Dr. Lin developed a Capacity Analysis Report (CAR) in which population growth projection and supply-demand analysis was conducted. The CAR concluded that by October 2012 a new water source will be necessary. Dr. Lin, joined by project geologists, is currently working with TEC in acquiring new well sites, exploring water quality and quantity, obtaining Water Management District consumptive and FDEP construction permits, and the engineering design. The new supply well is anticipated to be placed into service by October 2012.

Chen H. Lin, P.E., Ph.D. (Cont.)

Florida Department of Corrections (FDOC) Lancaster Correctional Institution Water Supply System Expansion, Trenton, Florida. In association with the prison expansion, Lancaster Correctional Institution needed to expand its water supply system. Dr. Lin is the engineer of record for the design and construction of this project. The design included a 10,000-gallon hydropneumatic tank, a 200,000-gallon glass-infused ground storage tank, high service and fire protection pump station, and chlorination system. He developed the PER, obtained the FDEP construction permit, completed the design plans and specifications, and assisted bidding of the project and procurement of the construction contractor. This project is currently in the beginning stage of submittal review and the construction is scheduled to begin in mid February 2010.

FDOC Martin Correctional Institution Water Supply System Upgrade, Indiantown, Florida. Martin Correctional Institution's water supply system was under the FDEP consent order for elevated DBP levels and lead and copper concentrations in the finished water. Dr. Lin was tasked by FDOC to complete a fast-track evaluation and design of the water treatment system upgrade in compliance with the conditions and schedule specified in the consent order. As the engineer of record he completed a bench-scale treatability study, developed the PER, obtained the FDEP construction permit, completed the design plans and specifications, conducted the bidding of the construction, oversaw the construction, managed the start-up and disinfection, provided completion certification to FDEP, and obtained the FDEP clearance for placing the system into service. This project has been successfully completed and, more importantly, it fulfilled the requirements specified in the consent order.

FDOC Mayo Correctional Institution Water Supply System Modification, Mayo, Florida. Mayo Correctional Institution's water supply system was under an FDEP consent order and a USEPA administrative order for elevated DBP levels in the finished water. Dr. Lin was tasked by FDOC to complete design of the water treatment system modification in compliance with the conditions and schedule specified in the consent/administrative orders. As the engineer of record, he developed the PER, obtained the FDEP construction permit, completed the design plans and specifications, conducted the bidding of the construction, oversaw the construction, arranged the disinfection, managed the start-up, provided completion certification to FDEP, and obtained the FDEP clearance for placing the system into service.

City of Live Oak Water Supply System, Live Oak, Florida. City of Live Oak's water supply system has been designated by FDEP as under the direct influence of surface water (UDI) and is required to treat the raw water through lime coagulation, precipitation, and filtration processes. Dr. Lin compared other feasible treatment alternatives and performed a cost-benefit analysis for the City of Live Oak and concluded that securing new water sources/ supply wells will be a more cost effective long-term solution. Based on this assessment, City of Live Oak is currently installing a new production well. Dr. Lin and other JSA geologists are assisting the

Chen H. Lin, P.E., Ph.D. (Cont.)

City of Live Oak in the well pumping tests, water quality assessment, and potential treatment evaluation. This project is still ongoing as of January 2010.

Martin Electronics Ordnance Facility, Perry, Florida. For Martin Electronics, Inc., (MEI), an explosives manufacturer, Dr. Lin completed the design plans and specifications for its water supply system, procured the construction contractor, managed the construction and disinfection, conducted the system start-up, and provided completion certification to FDEP. This project has been successfully completed and the new water system has been in operation since July 2009.

Landfill:

Aeon Church C&D Landfill, Tallahassee, Florida. For this privately owned C&D landfill, Dr. Lin successfully secured the FDEP operating permit renewal in 2009-2010 during which time the Florida Solid Waste Rules were being amended and FDEP substantially changed its permitting review policies so this renewal was processed by FDEP essentially through the same scrutiny as a new application. As the engineer of record, Dr. Lin redesigned the landfill cells, stormwater management facility, and the final cover. He also developed the closure and long-term care plans, groundwater monitoring plans, operation plans, and the financial assurance cost estimate.

Tram Road C&D Landfill, Tallahassee, Florida. For this new privately owned C&D landfill, Dr. Lin oversaw the construction of the first cell, developed and submitted to FDEP the completion certification, and obtained the FDEP approval for operations in 2008. In the 2009 FDEP operating permit renewal he worked closely with the client and the FDEP in integrating the new Florida Solid Waste Rules into the new permit and assisted in reaching solutions to FDEP's policies reversal regarding certain critical conditions, including the liner and leachate collection/treatment requirements, cell bottom elevation, and operational protocols. Dr. Lin redesigned the landfill cells, designated resource recovery area, and stormwater management facility. He also developed the closure and long-term care plans, groundwater monitoring plans, operation plans, and the financial assurance cost estimate.

International:

Municipal Wastewater Treatment and Solid Waste Disposal Infrastructure Development, Shandong Province, China. As a consultant to Asian Development Bank, Dr. Lin evaluated feasibilities of secondary and tertiary wastewater treatment and reclaimed water reuse alternatives for four cities and in this province. He also reviewed the industrial wastewater treatment FS for two paper pulp mills and siting and preliminary design of solid waste landfills for three other cities. From this evaluation Asian Development Bank made a determination to finance \$80 million loan toward this \$180 million investments.

US TIES Program, China. Under the US State Department's TIES Program, Dr. Lin was a member of a team that joined representatives of China's State

Chen H. Lin, P.E., Ph.D. (Cont.)

Environmental Protection Administration, the World Bank, Asian Development Bank, and several provincial and municipal environmental protection bureaus in their efforts to strengthen China's hazardous and toxic waste regulations. He helped formulate technical and performance specifications for waste treatment and disposal and participated in the identification and evaluation of US-China hazardous and toxic material treatment/disposal technologies.

Qujing Water and Sewage System, Yunnan Province, China. For this World Bank-financed, \$400-million project, Dr. Lin conducted water supply and wastewater treatment system evaluations for the City of Qujing. He evaluated water resources quality and quantity, reservoir protection, distribution network analysis, and water purification technology selection; inspected the municipal utility systems; developed protocol for computer-aided design mapping of the piping systems; and developed O&M manuals for the sewer collection, sewage treatment, water distribution, and water purification systems. In an effort to conserve water resource and resolve the city's water shortage problems, he also organized a citywide water main pressure survey and used the results to develop a citywide water main leakage detection and prevention implementation plan.

Landfill Design Review, Shenyang, China. Dr. Lin reviewed the design for an industrial hazardous waste landfill and its associated chemical/physical wastewater treatment plant, which receives liquid industrial waste and landfill leachate. The project was part of a World Bank-funded industrial waste treatment and disposal project for the City of Shenyang.

Industrial Hazardous Waste Management, Beijing, China. Dr. Lin managed a two-year, World Bank-funded program to assist the Beijing Industrial Hazardous Waste Management Center and Beijing Environmental Protection Bureau in the development of programs to control hazardous waste generation, transport, treatment, storage, and disposal. He evaluated existing environmental laws and regulations in the PRC and Beijing and made recommendations to address identified deficiencies. He organized and performed hazardous waste inspections for 20 of the city's largest hazardous waste generating and treatment, storage, and disposal (TSD) facilities. These included three petrochemical plants, six chemical manufacturers, two pharmaceutical plants, three machinery factories, two electronic factories, two automobile manufacturers, a leather tanning plant, and a waste management facility. He identified potential environmental problems and recommended solutions including front-end waste minimization, proper handling, end-of-pipe treatment.

As part of the Beijing program, he also developed training programs for regulators and for industrial environmental personnel and conducted "hands-on" training during the in-plant inspections. In addition, Dr. Lin developed a waste management information system; completed the preliminary design for Beijing's centralized hazardous waste TSD facilities; and helped develop financial strategies for the city's hazardous waste management center.

Hubei Urban Environmental Project Package B, Hubei Province, China. Dr. Lin was the training task manager for a four-year, \$400-million (US), World

Chen H. Lin, P.E., Ph.D. (Cont.)

Bank-funded program to assist institutional development in wastewater collection/treatment, municipal solid waste management, air pollution control, and process improvements. He evaluated the engineering design for the Yichang Landfill and recommended modifications that were subsequently approved by World Bank and resulted in substantial cost savings for the Hubei Urban Environmental Project Office. In addition, he developed a training manual for municipal solid waste landfill operators in the City of Yichang. The manual was later adapted as training material for the City of Dalian under the Liaoning Urban Construction and Renewal Project Office, funded by the International Bank for Reconstruction and Development and the International Development Association.

Panda Detergent Manufacturing Plant, Beijing, China. In support of a joint venture by the Beijing Second Daily Chemical Plant and Procter and Gamble, he participated in an operational audit. He evaluated pollution prevention concerns and contributed to the final report, which was one of several documents supporting the plant's application for an operating permit.

Industrial Waste Management Program, Taiwan. For Taiwan Environmental Protection Administration (EPA), Dr. Lin developed an industrial waste management program for Taiwan. He reviewed hazardous waste cleanup proposals submitted by industries in Taiwan; conducted over 1,000 in-plant, multimedia inspections for stationary pollution discharge; provided recommendations to the Taiwan EPA. In addition, Dr. Lin contributed to the drafting of Taiwan's hazardous waste management regulations and technical standards.

Water Conservation and Distribution System evaluation, Taipei, Taiwan. During six years with Taipei Water Department in Taiwan, Dr. Lin participated in a water budget balancing program which included raw water source development, surplus water storage, in-plant process wastewater reuse, and distribution system leak reduction. He was later in charge of water distribution system maintenance, improvement, and leakage prevention for the entire Municipality of Taipei (population three million).

Water/Wastewater Treatment Engineer, Taipei, Taiwan. He worked for one year as a civil engineer with Ta-Shun Engineering, Inc., responsible for the turnkey design and construction of industrial water and wastewater treatment facilities. The projects included two electroplating wastewater treatment facilities: one for the Taipei Locomotive Maintenance Plant that involved use of ion exchange technologies, and the other for a military armory in Taipei that involved use of chemical and physical coagulation and precipitation. Dr. Lin also was responsible for the construction management, start-up, and commissioning of a water purification facility at the Second Nuclear Power Plant in Taiwan.

Environmental Damage Claims, Saudi Arabia. For the Saudi Arabian Presidency of Meteorology and Environment, Dr. Lin oversaw development of the preliminary remedial design and prepared the engineering cost estimate for the remedial alternatives proposed to mitigate contamination along the Saudi Arabian coastline resulting from the 1991 Gulf War oil spill. The remedial design called for

Chen H. Lin, P.E., Ph.D. (Cont.)

the removal of millions of cubic yards of oil-contaminated sediment and restoration of the affected environment. The design involved material handling, off-site thermal treatment of the contaminated sediment, and reestablishment of biodiversity.

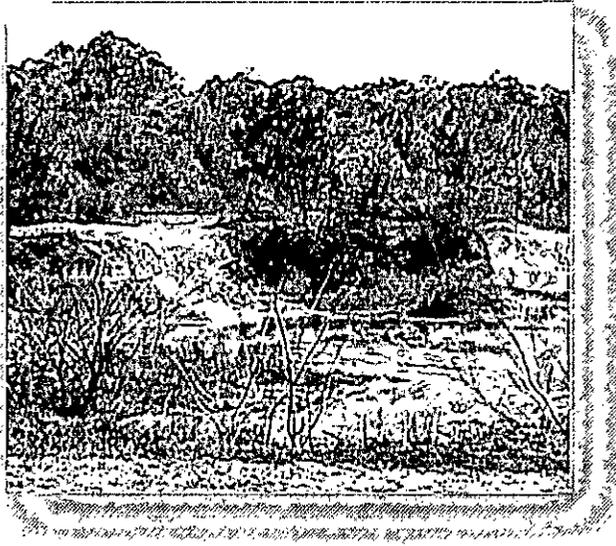
El Tablazo Petrochemical Complex, Maracaibo, Venezuela. For Petroquímica de Venezuela, S.A., Dr. Lin reviewed and recommended modifications to the engineering design of pollution prevention systems for the 1,200-metric-ton-per-day urea/fertilizer plant. His recommendations greatly improved the cost-effectiveness of the pollution prevention measures and significantly reduced both the capital construction and O&M costs for the client.

Automotive Parts Manufacturing Plant, Matamoros, Mexico. He led a group of engineers in the design of a biological treatment facility for the plant's industrial and domestic wastewater.

**B. EXPERIENCE WITH PROJECTS OF A SIMILAR TYPE AND
SIZE**

1. PROJECTS WHICH BEST ILLUSTRATE THE EXPERIENCE OF JSA

The following is a list of projects JSA has performed which best illustrate our experience. The following projects were selected to provide general overview of the abilities of JSA in several areas of work.



Aenon Church Road C&D Landfill

2320 Aenon Church Road
Tallahassee, FL 32310
(850) 576-6900

Project Responsibilities:
Water Quality Monitoring
C&D Permitting
Air Quality Permitting

Client: Jimmy Crowder Excavating and Land Clearing, Inc.

Contact: Ms. Tina Crowder, President (850) 576-7176

Date of Completion: Ongoing

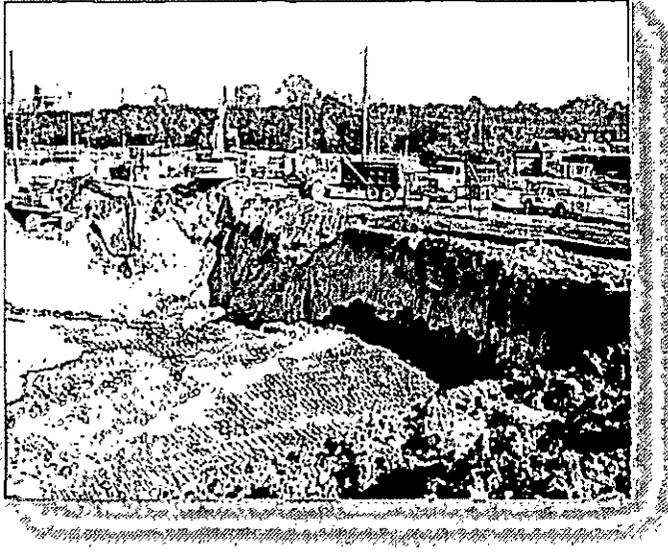
Project Manager(s): Scott Sigler P.G., Chen Lin P.E. Ph. D.

Project Description:

Jim Stidham & Associates provides regulatory guidance, environmental monitoring and reporting assistance for this Construction and Demolition landfill in Leon County, FL. Following the requirements of the FDEP permit, under the provisions of Section 403.707, Florida Statutes and Chapter 62-701, Florida Administrative Code, JSA provides application, technical drawings, plans, and geological support through installation and sampling of the groundwater monitoring system within the Zone of Discharge.

There is no overland flow from the site and monitoring is limited to subsurface investigations of the water table as well as upper Floridan aquifer. Sampling is conducted twice annually with spring and winter events. All field activities are conducted in accordance with Florida Department of Environmental Protection's Groundwater Sampling Standard Operating Procedures (DEP-SOP-001/01, FS 2200 Groundwater Sampling). Monthly rainfall data is collected at the site. Hydrologic mapping of water table and potentiometric surfaces is performed by JSA's hydrogeologists. Sample results are compared to regulatory limits found in Chapters 62-777, 62-550, and 62-302 F.A.C. with digital ADaPT review, internal Quality Assurance and Quality Control review, and Professional Geological oversight.

Air Quality monitoring of onsite rock crusher is overseen annually by qualified engineer in order to meet the criteria specified in Aenon Church's C&D operating permit.



Coastal Lumber Company

8007 Florida Georgia Highway
Havana, FL 32333
(850) 539-6432

Project Responsibilities:
Environmental Assessment
Remedial Action Plan
Construction Management

Owner: Costal Lumber Company

Contact: Jim Pattillo (850) 539-6432

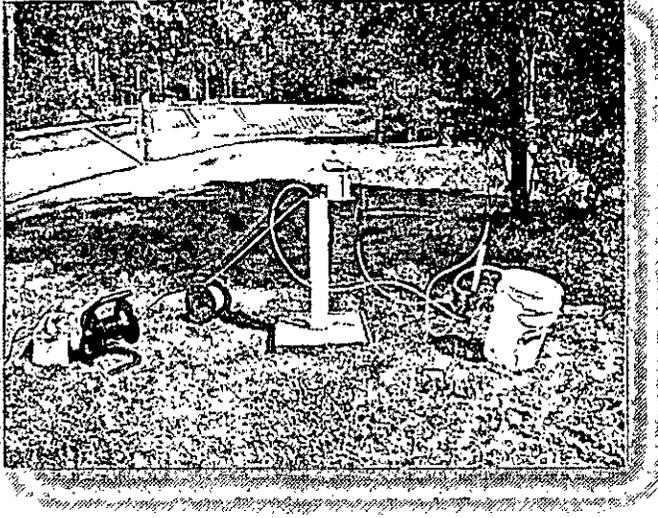
Date of Completion: Ongoing

Project Manager(s): Rick Kelly P.G., Ben Rush P.E.

Project Description: JSA has performed site assessment activities at this site from 2000 through 2008. This assessment resulted from a large discharge of petroleum products at this site in the early 1990's. JSA was selected by the Coastal Lumber facility to perform assessment and remediation activities at this site through the FDEP Preapproval Cleanup Program (under the Inland Trust Protection Fund). The assessment resulted in the detection of significant petroleum contamination in the soil media from depths of 2 feet to 28 feet below land surface. Through the installation of over 100 soil borings and the collection of over 60 soil lab samples, JSA was about to model the horizontal and vertical limits of this large soil plume. The assessment revealed minimal petroleum contamination in the underlying surficial aquifer that is approximately 40 ft BLS.

Upon completion of the assessment and the detailed modeling of the soil plume, JSA prepared a remedial action plan to address the significant petroleum impacted soil zones at this site. This plan was approved by the FDEP and JSA subsequently prepared a Construction Bid Package to excavate and remove an estimated 22,500 tons of petroleum impacted soils. The proposed excavation plan was complex in that the areas of beneath the active scale house drive (that facilities 80-100 log trucks per day) had to be performed in a 10 day window that coincided with the planned plant shutdown for equipment retro fit activities. Upon selecting a qualified construction contractor, JSA submitted a proposal for approximately \$1.2 million to the FDEP to perform this source removal. The plan was approved by the FDEP and site construction activities began in December 2008. Over a 2 month period, JSA directed and performed daily construction oversight activities to excavate over 22,500 tons of petroleum impacted soils that were transported to a proper disposal facility. The excavation area was then properly back filled

and the site was restored to standards that exceeded preexisting site conditions. JSA was able to perform this large excavation without interrupting the daily business operations of the Coastal Lumber facility. The excavation effectively removed all soil contamination at this site.



Gadsden County Landfills

Gadsden County - Florida
(850) 431-1155

Project Responsibilities:
Surface Water Monitoring
Groundwater Monitoring
Environmental Assessment
Landfill Gas Monitoring

Owner: Gadsden County

Contact: Mr. Herb Chancey, Gadsden County Recreation and Public Works (850) 875-8672

Date of Completion: Ongoing

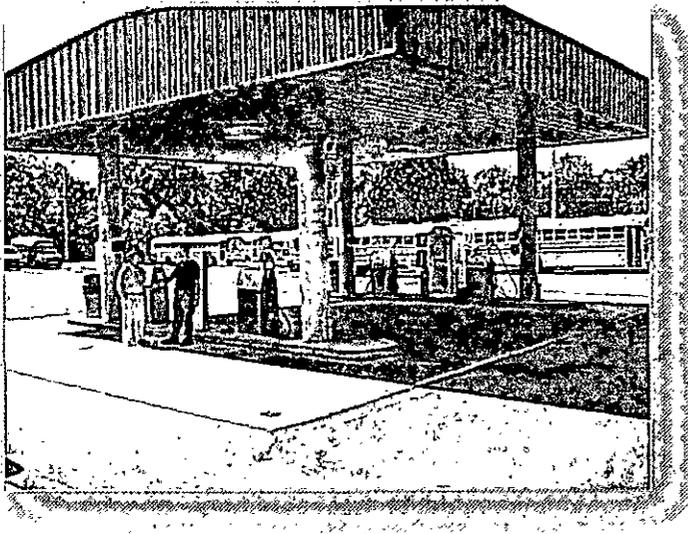
Project Manager(s): Scott Sigler P.G., Dan Litteral P.G.

Project Description:

Jim Stidham & Associates provides regulatory guidance, environmental monitoring and reporting assistance for the Gadsden East (Havana) and Chattahoochee Landfills, two closed Class II Sanitary Landfills in Gadsden County, FL. Following the requirements of FDEP permits, under the provisions of Section 403.707, Florida Statutes and Chapter 62-701, Florida Administrative Code, JSA provides application, technical drawings, plans, and geological support through landfill gas observations and sampling of the groundwater monitoring system within the Zone of Discharge.

Both facilities have surface water bodies associated with monitoring as well as subsurface investigations of the water table and/or intermediate saturated strata. Sampling is conducted twice annually with spring and winter events. All field activities are conducted in accordance with Florida Department of Environmental Protection's Groundwater Sampling Standard Operating Procedures (DEP-SOP-001/01, FS 2100, 2200 Surface Water and Groundwater Sampling). Monthly rainfall data is not available from the site but is instead recovered from nearby NOAA monitoring stations. Hydrologic mapping of water table and potentiometric surfaces is performed by JSA's hydrogeologists. Sample results are compared to regulatory limits found in Chapters 62-777, 62-550, and 62-302 F.A.C. with digital ADaPT review, internal Quality Assurance and Quality Control review, and Professional Geological oversight.

Additionally, the Chattahoochee landfill is undergoing increased monitoring of compliance wells, as well as off-site investigation wells, and supplemental surface water bodies associated with Site Assessment Investigations per 62-780.600 F.A.C. Changing redox conditions within groundwater leaching from the landfill have caused increased concerns regarding iron and arsenic solubility. Through the course of investigation, an alternative background value for dissolved iron was established for the site. Also, temporary points of compliance down gradient from the facility were designed, installed and sampled by JSA.



Gadsden County Bus Barn

720 South Stewart Street
Quincy, FL 32351

Project Responsibilities:

Environmental Assessment
UST Closure
Engineering and Institutional Controls

Owner: Gadsden County School Board

Contact: Mr. Wayne Shepard (850) 508-4766

Date of Completion: Ongoing

Project Manager(s): Dale Frierson P.G.

Project Description:

JSA was contracted by the Gadsden County School Board (GCSB) to perform petroleum system upgrades to their existing Bus Maintenance Fueling Station in July 2009. The purpose of this project was to upgrade the diesel fueling facility to comply with 62-761 F.A.C. and automate the fueling system to improve efficiency and record keeping. The project consisted of properly abandoning in place two 12,000 gallon fiberglass diesel USTs, associated lines and dispensers. Upon abandonment of the existing fiberglass tanks, JSA provided oversight for the installation of a new 20,000 gallon double wall tank with appropriate leak detection and inventory monitoring equipment in compliance with 62-761 F.A.C. The upgrade included new dispensers, electronic tank monitoring and inventory probes and fuel management software. All equipment complied with FDEP's Approved Equipment List as specified in 62-761.850 F.A.C. and 62-762.851 F.A.C.

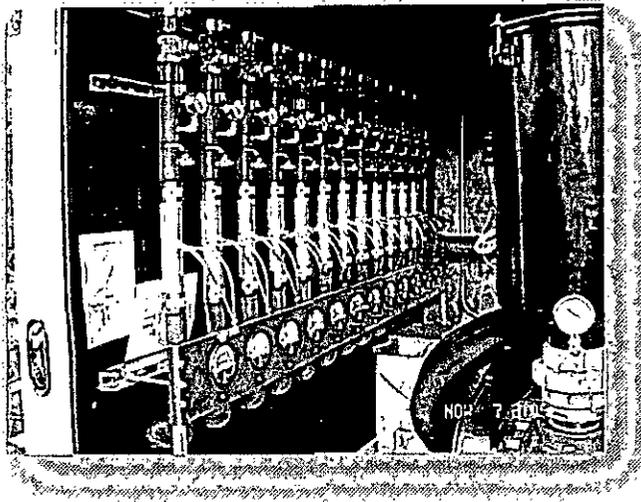
Prior to the fuel system upgrade, JSA performed a UST Closure Assessment around the two existing diesel tanks in July and August 2009. Petroleum impacts to site soils were confirmed in soil samples collected adjacent to the southern UST and beneath southeastern dispenser. JSA recommended performance of a Site Assessment around the southern UST, only. Subsequently, JSA initiated site assessment activities on September 8, 2009 within 30 days of the documented date of initial discovery. Site assessment activities were completed on September 9, 2009.

Following consultation with the client and FDEP, the goal for this site was to satisfy the criteria for No Further Action with engineering and/or institutional controls. Soil containing concentrations of benzene, total xylenes, MTBE, 1-methylnaphthalene, 2-methylnaphthalene,

and TRPHs exceeding their respective LBGC, DER and/or DEC/I SCTLs were reported in two (2) samples collected south of the abandoned southern UST and beneath the southeastern dispenser, respectively. Nine (9) additional soil samples were collected during the site assessment for determination of horizontal and vertical extent of soil contamination at the site. None of the samples contained reported concentrations of analytes of concern in excess of the SCTLs. Samples collected from beneath the source area (SB-6) did not contain reported concentrations of analytes of concern in excess of the SCTLs. Results of the TRPH-SPLP reported in the TCAR did not reveal concentrations of TRPH in excess of the GCTLs providing confidence that leaching of TRPHs to site groundwater is unlikely.

During the site assessment, JSA demonstrated contaminants in site soil would not leach to groundwater, thereby eliminating a potentially costly and time consuming groundwater assessment. A Site Assessment Report (SAR) was authored by JSA and submitted on December 11, 2009. In the SAR, JSA concluded that the Site Assessment is complete based on data collected to date and the site met the No Further Action criteria of subsection 62-770.680(2) [Risk Management Options Level II] for No Further Action with Engineering/Institutional Controls with the ultimate goal being a Site Restoration Completion Order (SRCO) with Engineering and Institutional Controls. JSA also recommended production of a RAP for the site. JSA will author a RAP following approval of the SAR by FDEP.

JSA authored the required documents for completion of the Restrictive Covenant for Engineering and Institutional Controls for the site, limiting the restricted portion of the property to a small portion of the parcel immediately surrounding the area of contaminated soil. JSA personnel are currently working with the GCSB, legal counsel for the GCSB, the FDEP Project Manager, and the FDEP Department of General Counsel to streamline the submittal process, thereby minimizing unnecessary delays in approval. The Restrictive Covenant for the site is currently being routed for approval and filing, followed by issuance of the SRCO



Kool Beanz Café

921 Thomasville Road
Tallahassee, FL 32303
(850) 224-2466

Project Responsibilities:
Site Assessment
Pilot Test
Remedial Action Plan
Remedial System O&M

Owner: Blue Dog Investments, LLC

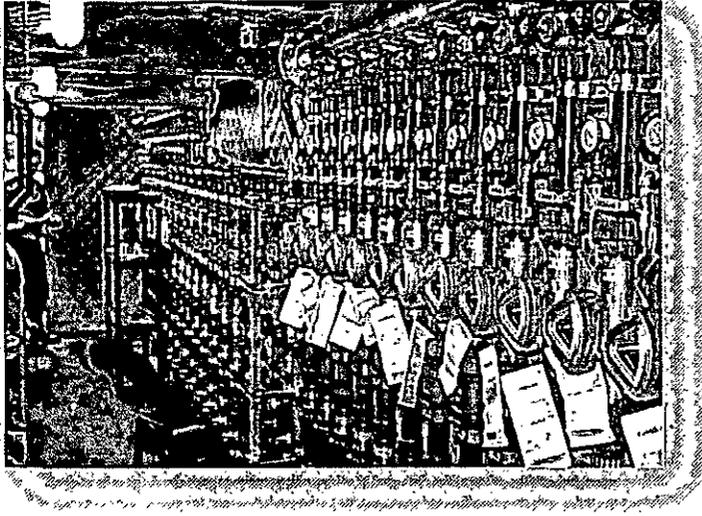
Contact: Mr. Paul Bradshaw (850-576-335)

Date of Completion: Ongoing

Project Manager(s): Ben Rush P.E., Bert Conoly P.E., Mark Cody

Project Description:

This former filling station was converted to a popular local restaurant after removal of gasoline UST's. The groundwater contamination plume at this site extended some 800' from the source area. Soil contamination was restricted to the site, but extended down to the water table at a depth of approximately 35'. After assessment was completed, an aggressive remediation system was designed, in accordance with the FDEP Preapproval Program Remedial Action Initiative. As part of this air sparge/soil vapor extraction (AS/SVE) system, JSA supervised the installation of the AS/SVE wells, plumbing of the wells to the system compound, and installation of the equipment compound. JSA also performed 3 years of operation and maintenance (O&M) at the site. After three years of operation, an estimated more than 3,000 pounds of petroleum contamination has been removed and all on site and off site monitoring wells with the exception of one are below state cleanup criteria. After three years of operation, an estimated more than 3,000 pounds of petroleum contamination has been removed and all off site monitoring wells are below state cleanup criteria. Currently, the site is in post remediation monitoring.



Palmour Property

*15757 NW Gainesville Road
Reddick, Florida*

Project Type(s):
Environmental Assessment
Pilot Test
Remedial Action Plan
Remedial System O&M

Owner: Pastor Mary C. Brown

Contact: Pastor Mary C. Brown (904) 910-8725

Date of Completion: Ongoing

Project Manager(s): Mark Cody, Ben Rush P.E., Rick Kelly P.G.

Project Description:

This former filling station was converted to a small church after removal and abandonment of gasoline and diesel USTs. The groundwater contamination plume associated with this site is approximately 59,000 sq. ft. in the surficial aquifer and approximately 10,000 sq. ft. in the deep aquifer (Floridan Aquifer) which extends off site. Petroleum contamination has been detected in one residential drinking water well which FDEP classified as Imminent Threat site. Soil contamination is restricted to the site but extends to the water table at a depth of approximately 38 feet. After assessment was completed, an aggressive remediation system was designed, in accordance with the FDEP Preapproval Program Remedial Action Initiative which includes 119 remediation wells treated by air sparge/soil vapor extraction (AS/SVE) with catalytic oxidizer treatment, horizontal biosparge wells under a highway, and deep groundwater recovery system with an air stripper treatment. As part of the remediation system, JSA supervised the installation of remediation wells, plumbing of the wells to the system compound, and installation of equipment compound. After one year of operation, an estimated 20,000 pounds of petroleum contamination has been removed by the system. Currently, the system is beginning the second year of operation and maintenance.



Planter's Exchange

204 NW 2nd Street
Havana, FL 32333
(850) 539-6343

Project Responsibilities:
Environmental Assessment
Remedial Action Plan
Source Removal
Remedial System O&M

Owner: Mr. Wayne Gregory

Contact: Mr. Wayne Gregory (850) 539-6343

Date of Completion: August 2010

Project Manager(s): Ben Rush P.E., Rick Kelly P.G., Bert Conoly P.E.

Project Description:

This historical building once housed a hardware and agricultural supply store from the early 1920's to 1980's. Excessive soil contamination was documented around the old UST and dispenser island located at the corner of the building. No groundwater contamination was identified at the site. After assessment was complete, JSA developed a cleanup strategy to remove contaminated soil under the old greenhouse and Planter Exchange building in 2008. Special attention was made to not compromise the building structure during source removal activities since the building is listed on the U.S. National Register of Historic Places. A source removal was performed utilizing a two row large diameter auger (LDA) wall along the building and road then excavate remaining contaminated soil by conventional excavation. A total of 1,162 tons of contaminated soil was removed and disposed at an FDEP approved facility. Upon completion of the source removal, a soil vapor extraction system was installed to a series of vapor extraction wells installed to address contamination under the historical building. After approximately one year of system operation, FDEP issued a Site Rehabilitation Completion Order (SRCO) in August 2010.



John G. Riley Elementary School

1400 Indian Street
Tallahassee, FL 32304
(850) 488-5840

Project Responsibilities:
Environmental Assessment

Owner: Leon County School District

Contact: Mr. Carl Green (850) 617-1780

Date of Completion: Ongoing

Project Manager(s): Dale Frierson P.G.

Project Description:

JSA was contracted by the Leon County School Board (LCSB) to perform a Site Assessment related to a release of heating oil at the site in February 2009. In 2008 a previous consultant performed a closure assessment on three Underground Storage Tanks (USTs) storing heating oil for use at the school. Two of the three USTs were removed and a limited source removal was performed to excavate identified petroleum impacted soil. Analytical samples collected during the closure identified contaminated soil remaining in place around the former excavation area. As a result, the Florida Department of Environmental Protection (FDEP) issued a Request for Site Assessment Letter in December 2008.

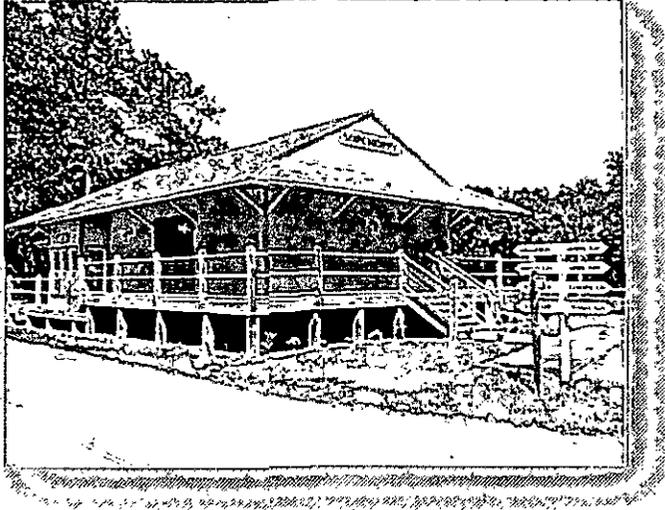
JSA began assessment at the site in March 2009 and assessment of impacts to site soil and groundwater were completed by June 1, 2009. Contaminants of concern identified in the soil in the UST closure report included petroleum constituents and several metals (arsenic, barium and chromium). The site was an active construction zone posing interesting challenges for completion of the assessment. JSA worked closely with the LCSB, FDEP and the General Contractor to ensure impacts to construction were minimized while the assessment continued with minimal interruption. During the site assessment, JSA demonstrated contaminants in site soil would not leach to groundwater, thereby eliminating a potentially costly and time consuming groundwater assessment. JSA also eliminated two of the three inorganic contaminants (arsenic and barium) by establishing alternative Cleanup Target Levels for the site.

While initiating site assessment activities, JSA assisted the LCSB with completion of the Initial Notice of Contamination procedures. New noticing procedures for school properties with documented contamination required the LCSB provide notice to various regulatory agencies and

all students and staff at the school. JSA provided guidance to the LCSB through coordination with FDEP and legal council to ensure the new noticing requirements were completed in accordance with Florida Statutes and Florida Administrative Code.

Following completion of assessment activities, JSA recommended the site met the No Further Action criteria of subsection 62-770.680(2) [Risk Management Options Level II] and FDEP concurred. A remedial action plan (RAP) was authored by JSA following approval of the site assessment. The RAP certified the engineering controls and best management practices (BMP) to be used in conjunction with Institutional Controls at the site with the ultimate goal being a Site Restoration Completion Order (SRCO) with Engineering and Institutional controls due to the inaccessibility of contaminated soil remaining below the new construction.

JSA authored the required documents for completion of the Restrictive Covenant for Engineering and Institutional Controls for the site, limiting the restricted portion of the property to a small portion of the parcel immediately surrounding the area of contaminated soil. JSA personnel worked closely with the LCSB, legal counsel for the LCSB, the FDEP Project Manager, and the FDEP Department of General Counsel to streamline the submittal process, thereby minimizing unnecessary delays in approval. The SRCO for the site is anticipated to be issued in March 2011.



Sopchoppy Train Depot

34 Rose Street
Sopchoppy, FL 32358

Project Responsibilities:
Environmental Assessment
Hazardous Material Monitoring
(Lead Based Paint)

Owner: City of Sopchoppy, Wakulla County, FL

Contact: Ms. Jackie Lawhon, City Clerk (850) 962-4611

Date of Completion: January 2008

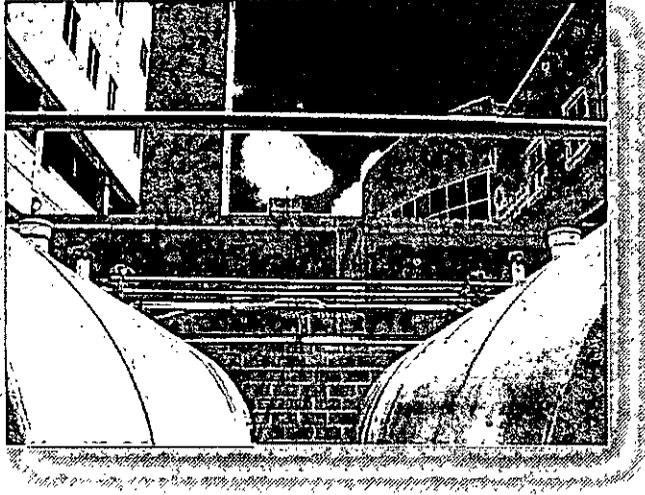
Project Manager(s): Scott Sigler P.G.

Project Description:

The former Train Depot in the City of Sopchoppy has undergone an investigation of lead concentrations within the soil and groundwater at the site. This investigation stems from the discovery of lead based paint used on the original facility during a previous site assessment, by others, on behalf of The Florida Department of Transportation, District III. Following that assessment the Train Depot was gifted to the City of Sopchoppy by the DOT. In a review response from FDEP the City of Sopchoppy was requested to conduct further assessment of the lead impacted soils at the Old Train Depot. Jim Stidham & Associates (JSA) performed the necessary investigation items and submitted a Site Assessment Report Addendum describing the results of soil collection and analysis to FDEP on behalf of the City of Sopchoppy, FL.

In subsequent work the horizontal and vertical delineation of soils with lead exceeding the residential exposure limit has been completed. Those soils have been excavated and placed into a proper receiving facility. Samples collected from the walls and floor of the excavation have confirmed a complete excavation of lead impacted soils. A Monitoring Only Plan of four consecutive quarterly events, found that lead concentrations in the groundwater at the site remained consistently below regulatory threshold values.

Following its review the Site Assessment and Addenda reports, the FDEP Northwest District concurred with JSA's findings, the monitor wells at the site were properly abandoned and the excavation was restored with clean fill dirt. The site has received No Further Action status with a Site Rehabilitation Completion Order.



Tallahassee Memorial Hospital

1300 Miccosukee Road
Tallahassee, FL 32308
(850) 431-1155

Project Responsibilities:
Spill Prevention, Control, and
Countermeasure (SPCC)

Owner: Tallahassee Memorial HealthCare

Contact: Ronald Follmar (850) 431-5856

Date of Completion: January 2011

Project Manager(s): Anthony Holley E.I., Bert Conoly P.E.

Project Description:

In late 2009, Tallahassee Memorial HealthCare (TMH) hired Jim Stidham & Associates (JSA) to assemble a Spill Prevention, Control and Countermeasure (SPCC) Plan. TMH had a total of six above-ground storage tanks ranging in size from 550 to 15,000 gallons in four separate locations. The SPCC Plan had to be developed for each location as a separate facility location. Current secondary containment, facility security systems, stormwater runoff locations and reaction procedures to spills were all reviewed and updated as needed. Best management procedures were also reviewed and updated to incorporate the SPCC procedures. In late 2010, TMH installed two more above-ground storage tanks to their existing system. This required the SPCC Plan to be revised to account for any possible areas that may need to be changed in the current SPCC plan.

2. CURRENT PROJECTS

A few of the current sites that are under contract with JSA that were not listed in previous project summaries are:

Aeon Church C&D Landfill

Jim Stidham & Associates provides regulatory guidance, environmental monitoring and reporting assistance for this Construction and Demolition landfill in Leon County, FL. Following the requirements of the FDEP permit, under the provisions of Section 403.707, Florida Statutes and Chapter 62-701, Florida Administrative Code, JSA provides permitting services including application renewal, technical drawings, groundwater monitoring plans, and geological support through installation and sampling of the groundwater monitoring system within the Zone of Discharge.

There is no overland flow from the site and monitoring is limited to subsurface investigations of the water table as well as the upper Floridan aquifer. Sampling is conducted twice annually with spring and winter events. All field activities are conducted in accordance with Florida Department of Environmental Protection's Groundwater Sampling Standard Operating Procedures (DEP-SOP-001/01, FS 2200 Groundwater Sampling). Monthly rainfall data is collected at the site. Hydrologic mapping of water table and potentiometric surfaces is performed by JSA's hydrogeologists. Sample results are compared to regulatory limits found in Chapters 62-777, 62-550, and 62-302 F.A.C. with digital ADaPT review, internal Quality Assurance and Quality Control review, and Professional Geological oversight.

Palmour Property

This former filling station was converted to a small church after removal and abandonment of gasoline and diesel USTs. The groundwater contamination plume associated with this site is approximately 59,000 sq. ft. in the surficial aquifer and approximately 10,000 sq. ft. in the deeper aquifer which extends off site. Petroleum contamination has been detected in one residential drinking water well which classifies this site as an Imminent Threat site. Soil contamination is restricted to the site but extends to the water table at a depth of approximately 38 feet. After assessment was completed, an aggressive remediation system was designed, in accordance with the FDEP Preapproval Program Remedial Action Initiative which includes 119 remediation wells treated by air sparge/soil vapor extraction (AS/SVE) with catalytic oxidizer treatment, horizontal biosparge wells under a highway, and deep groundwater recovery system with an air stripper treatment. As part of the remediation system, JSA supervised the installation of remediation wells, plumbing of the wells to the system compound, and installation of equipment compound. After one year of operation, an estimated 20,000 pounds of petroleum contamination has been removed by the system. Currently, the system is beginning the second year of operation and maintenance.

Gadsden County Landfills

Jim Stidham & Associates provides regulatory guidance, environmental monitoring and reporting assistance for the Gadsden East (Havana) and Chattahoochee Landfills, two closed Class II Sanitary Landfills in Gadsden County, FL. Following the requirements of FDEP permits, under the provisions of Section 403.707, Florida Statutes and Chapter 62-701, Florida Administrative Code, JSA provides application, technical drawings, plans, and geological support through historical monitoring well construction and sampling of the groundwater monitoring system within the Zone of Discharge. JSA also provides and methane gas monitoring at these facilities along with sampling of surface water bodies associated with each site. Sampling is conducted twice annually with spring and winter events. All field activities are conducted in accordance with Florida Department of Environmental Protection's Groundwater Sampling Standard Operating Procedures (DEP-SOP-001/01, FS 2100, 2200 Surface Water and Groundwater Sampling). Monthly rainfall data is not available from the site but is instead recovered from nearby NOAA monitoring stations. Hydrologic mapping of water table and potentiometric surfaces is performed by JSA's hydrogeologists. Sample results are compared to regulatory limits found in Chapters 62-777, 62-550, and 62-302 F.A.C. with digital ADaPT review, internal Quality Assurance and Quality Control review, and Professional Geological oversight.

Additionally, the Chattahoochee landfill is undergoing increased monitoring of compliance wells, as well as off-site investigation wells, and supplemental surface water bodies associated with Site Assessment Investigations per 62-780.600 F.A.C. Changing redox conditions within groundwater leaching from the landfill have caused increased concerns regarding iron and arsenic solubility. Through the course of investigation, an alternative background value for dissolved iron was established for the site. Also, temporary points of compliance down gradient from the facility were designated monitoring wells, installed and are part of the routine sampling plan.

Kool Beanz Café

This former filling station was converted to a popular local restaurant after removal of gasoline UST's. The groundwater contamination plume at this site extended some 800' from the source area. Soil contamination was restricted to the site, but extended down to the water table at a depth of approximately 35'. After assessment was completed, an aggressive remediation system was designed, in accordance with the FDEP Preapproval Program Remedial Action Initiative. As part of this air sparge/soil vapor extraction (AS/SVE) system, JSA supervised the installation of the AS/SVE wells, plumbing of the wells to the system compound, and installation of the equipment compound. JSA also performed 3 years of operation and maintenance (O&M) at the site. After three years of operation, an estimated more than 3,000 pounds of petroleum contamination has been removed and all off site monitoring wells are below state cleanup criteria. Currently, the site is in post remediation monitoring.

3. PROJECT REGULATORY PROCEDURES

JSA understands how the constantly changing design standards, codes and other regulatory directions can affect the outcome of a project even before it begins. So before any design is started on new projects, JSA reviews all current design standards, codes and other regulatory directions that pertain to each new project accepted by the firm. For new projects, it is also our custom to request a pre-project meeting with the regulatory group in order to be sure that there are no misunderstandings prior to project initiation.

4. SPECIAL AND BASIC RESOURCES

JSA has its own drilling division that provides close support to our Engineering and Geological services. JSA uses the following resources to provide a level of readiness and project efficiency that others find it hard to match:

- ✓ Software (AutoCAD Civil 3D, ArcGIS, Visual Modflow Groundwater Modeling and Surfer Surface Modeling)
- ✓ Failing F-7 Drilling Rig (Capable of both mud rotary and hollow stem auger)
- ✓ Mobil 861 HD Drilling Rig (Capable of both mud rotary and hollow stem auger)
- ✓ AMS 9600 Pro Power Probe (Capable of split-spoon sampling and hollow stem auger)
- ✓ AMS 9100 VTR D Power Probe (Capable of split-spoon sampling and fitting through existing doorways)
- ✓ Grunfos 2" and 4" Submersible Pumps and Controllers
- ✓ Geotech Peristaltic Pumps
- ✓ Geotech Bladder Pumps and Controllers
- ✓ In-situ Level Troll Model 700 Transducers
- ✓ In-situ Troll 9500 Multi-parameter Water Quality Meter
- ✓ Marsh-McBirney Flow Mate 2000 Sonic Flow Meter
- ✓ Solinst and Heron Electronic Water Depth Tapes
- ✓ Pakton pH, Conductivity, ORP and Oxygen Probes/Meters
- ✓ LaMotte 20/20e Turbidometers
- ✓ RAE OVA Photo Ionization Detector (PID)
- ✓ Perkin Elmer OVA Flame Ionization Detector (FID)
- ✓ TDS Ranger Surveying Data Logger

- ✓ Sokkisha Set 3 Total Station

C. WILLINGNESS TO MEET SCHEDULE AND BUDGET REQUIREMENTS

JSA recognizes the importance of *schedule and budgets* in any project. We, as a general routine, hold project scheduling meetings weekly with our project managers. A project timetable is generated to assure timely field and project completion activities, based on the clients scheduling needs, and the regulatory requirements. As a general rule, Gantt Charts, scheduling software, and other tools are utilized to establish critical paths for project implementation. Additionally, budgetary monitoring of our projects is performed in an on-going manner by utilization of internal JSA budget tracking measures, staff meetings, and accounting reports generated internally.

D. EFFECT OF FIRM'S RECENT, CURRENT AND PROJECTED WORKLOAD

1. CURRENT PROJECTS

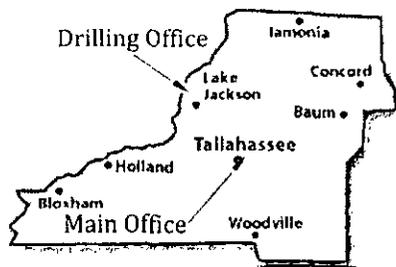
On the following page is a list of projects JSA currently is under contract with. All Florida Department of Environmental Protection (FDEP) sites project completion date are to be considered ongoing due to the nature of the petroleum clean-up program.

Project Name	Project Completion Date	Description
FDEP - Pug's Beer & Wine	Ongoing	Ongoing Remediation
FDEP - Day by Day, Inc	Ongoing	Monitoring
FDEP - Palmour Property	Ongoing	Operation & Maintenance
Forsythe Property	Ongoing	Environmental Site Assessment
Gadsden County - Bus Barn	Second Quarter 2011	Waiting for Restrictive Covenant
FDEP - Havana Car Wash	Ongoing	Remedial Action Plan Design
FDEP - Cliff Berry	Ongoing	Site Assessment
FDMS - Monroe County WWTP Demolition	First Quarter 2012	Design
TEC - Wetumpka	Third Quarter 2011	Design
TEC - Songbird	Ongoing	Monitoring & Reporting
Gadsden East Landfill	Ongoing	Monitoring & Reporting
Chattahoochee Landfill	Ongoing	Monitoring & Reporting
FDEP - C&T Variety	Ongoing	Post Remedial Monitoring
FDEP - Woodland	Ongoing	Remedial Design/Monitoring
FDEP - Whitaker Oil	Ongoing	Remedial Action Plan Design
FDEP - Furniture Warehouse	Ongoing	Pilot Test/Design
FDEP - King's Station	Ongoing	Remedial Action Plan Design
FDEP - Raceway	Ongoing	Site Assessment
FDEP - Kool Beanz	Ongoing	Post Remedial Monitoring
FDEP - The Bookshelf	Ongoing	Remedial Action Construction
FDEP - Jet Fuel, Inc.	Ongoing	Remedial Action Construction
Aenon Church C&D Landfill	Ongoing	Monitoring & Reporting
FDEP - Wakulla Old Sheriff's Office	Ongoing	Site Assessment
TEC - Killlearn WWTP	Ongoing	Monitoring & Reporting
TEC - Meadows WWTP	Ongoing	Monitoring & Reporting
TEC - Gadsden East WWTP	Ongoing	Monitoring & Reporting
TEC - Lake Jackson WWTP	Ongoing	Monitoring & Reporting

2. JSA ABILITY TO ABSORB NEW PROJECTS

We at JSA pride ourselves in our diverse capabilities. Our professionals are highly experienced in all areas of our operation, regardless of the project. Our staff cross train within JSA to become familiar with the wide variety of projects we handle. This allows JSA to have flexibility in allocating staff to various projects. Additionally, we have multiple professionals in the industry that we can bring in as a sub-consultant if additional expertise is required. Therefore, JSA is immensely willing and able to utilize inside as well as outside sources to absorb new projects when necessary.

E. EFFECT OF PROJECT TEAM LOCATION



JSA is located at 547 North Monroe Street, Suite 201 in Tallahassee, Florida, in the middle of Leon County. This location will be the central office for any project acquired from this contract. This convenient proximity to Leon County offices as well as most likely project locations provides the ability to meet with Leon County staff easily and quickly as necessary as well as visit sites or projects without minimal mobilization costs. We feel as though our location will be a great asset in keeping projects cost effective.

Additionally, JSA maintains a satellite office and equipment warehouse approximately six (6) miles north of I-10 on Hwy 27 in northern Leon County. At this location, we are able to keep our fleet of drilling vehicles, material, supplies, and shop equipment necessary to operate and environmental operation. It also provides convenient access to I-10 and Monroe Street thereby providing efficient access to project locations throughout the county.

F. APPROACH TO THE PROJECT

PROJECT MANAGEMENT PLAN

JSA is committed to completing our assignments to meet and exceed our client's expectations and requirements, within budget, and on time. Our goal is to work in close partnership with the County, involve its staff in project development and alternative decisions, and produce an operator friendly, low maintenance, cost effective project. To this end, quality assurance programs on our projects include quality assurance and control, as well as project scheduling, management, and budgetary control measures as part of our integrated quality management program.

Three basic keys for a successful project are communications, monitoring, and adjusting. Communication among the team members, County staff, and JSA staff is the key element to effective management under this contract. This begins with a well-defined scope of work prepared by JSA and the County. The communication must continue throughout the project as the requirements are disseminated to the individual team members and as coordination of the various work activities proceed.

The major elements of JSA management approach include our Project Execution Plan, well established Lines of Communication, Quality Assurance/Quality Control, Cost Control, and Timeliness.

PROJECT EXECUTION PLAN

Our Project Management Guidelines requires the preparation and adherence to a Project Execution Plan (PEP) for each project. The project specific PEP is an easy reference to the critical project requirements for all involved staff and provides the details of the scope of work, project requirements, organization of project staff, schedules, budgets, and quality control and quality assurance procedures to be implemented.

The following is a PEP Outline:

Project Objectives, Approach, And Scope of Services

- Briefly describes the project objectives and approach to meet those objectives.
- Describes the scope of services and the deliverables in detail.

Schedule

- The project schedule identifies the relationship of individual and related tasks on the project time line.
- The schedule identifies milestone dates, deliverables, review and permitting
- The project schedule provides for a method of tracking project progress and is updated to reflect that progress.

Responsibilities of Key Personnel

- The responsibilities of all discipline managers, key personnel, and subconsultants are clearly defined.
- Each shall be responsible for the scope compliance, the content, the correctness, and the timely completion of his or her portion of the work.

Quality Assurance and Quality Control Procedures

- The General Quality Control Guidelines are reviewed and modified to correspond with any unique requirement of the project.
- Studies, design, budget, scheduling, submittals, permitting constraints, etc., which are crucial to the project execution are described in detail.

- The review processes are defined in detail, including staff member who will conduct the review, what project elements will be reviewed, at what level of project completion each review will be conducted, and how will the reviews be documented.
- A schedule and a typical agenda will be prepared for regularly scheduled review meetings.
- A progress reporting system for the projects will be developed and outlined and the frequency of progress reports established.
- Explicit procedures for estimating actual completion of the work will be identified.
- The corporate and divisional reports will be used to monitor job costs will be selected and identified.

ESTABLISH LINES OF COMMUNICATION

To maintain the project schedules, it is important to maintain timely, internal communications and communication between the consultant, subconsultants, the County and permitting agencies. These communications must be clear, concise and precise. Proven in-place vertical lines of communication and data transfer procedures from our Project Director/Manager, Mr. Bert Conoly, P.E. proceeding down to the task managers and on to the design engineers, technicians and secretaries will be utilized.

Lines of communications with the County will be through Mr. Bert Conoly, P.E. and the County Project Manager. Communications to permitting and other agencies will be through our Project Manager and the engineer or architect responsible for preparing the application or performing the required design.

We will provide the City with monthly reports to provide current project status information. These reports, which will cover activities, problems, and recommendations, will facilitate our goal of maintaining the City involvement throughout the project. The activities section of the monthly reports will also include: task items percent complete and budget status, percent and graphic plot of total work complete and total budget status of projected work for the next monthly period, and percent of total projected time expended.

QUALITY CONTROL/QUALITY ASSURANCE

JSA designs are innovative, complete, and developed with care to provide bid documents that are clear to contractors and to protect the interests of our clients. The best measures of quality are low change orders and repeat business. We enjoy a 90% repeat business with our existing clients, many of which we have served for over 20 years.

Quality control on the County's assignment is just as important to JSA as it is to the County. Quality control is only effective if it is conducted throughout the assignment. It begins at the initiation of a project by receiving the input from the most experienced staff and continues with peer reviews throughout the project. It is not incorporated into

our projects as a separate effort, as a distinct task, or as a specific duty. Quality is an attitude within each of our staff about how and what we do to provide quality work to our clients while remaining within our budgetary constraints.

All project deliverables undergo a formal review process prior to submittal to the client. QA/QC reviewers are a part of the Project Team, having experience in terms of design, construction, and QA reviews. They are senior staff personnel selected at the start of a project who are involved in and informed about the project from conception through completion, particularly regarding project objectives, approach to completion of the scope of work, and client expectations.

JSA is committed to providing high quality engineering service to its customers through its continuous quality improvement program that involves all personnel in a systematic, logical process to continually improve the firm's work practices and procedures. Achieving this goal requires a certain amount of regimen to coordinate our effort toward producing a quality product, to provide clear procedures to be followed, and to monitor the results of our efforts. The JSA team will utilize the following approach to quality involving: procedures for project execution, QA/QC procedures, the continuous quality improvement process, technical review committee, value engineering and constructibility reviews, and review meetings. These areas are detailed below.

- **Procedures for Project Execution:** Standard procedures for project execution are documented in Project Management Quality Guidelines (PMQG), adopted by the firm's Board of Director. The PMQG provides project managers with current guidelines and procedures for managing projects and assuring quality in our technical performance for the proposal stage through the closeout stage.
- **QA/QC Procedures:** As our projects grew even more complex, our clients communicated to us that technical quality alone was not addressing their needs. We therefore developed procedures to assure the quality of the services we were delivering to our clients. Our Quality Manual establishes the general quality control guidelines for technical quality control of the services we provide: planning reports and studies, design services, construction phase services, and facility inspection services. The Quality Manual is used in conjunction with the Project Management Manual to integrate the technical and management practices necessary to complete assignments successfully. The success of a completed project is judged against the following criteria: Client Satisfaction, Project Objectives, Scope Requirements, Project Budget, and Project Schedule.
- **Review Meetings:** In addition to technical in-house workshop sessions, the Project Manager, together with key members of the Project Team, will meet with County staff on a monthly basis, and more often when appropriate, to discuss overall project progress, design requirements, permitting, and related management issues. In addition to the review of monthly progress reports, additional meetings will be established to include formal review for the work

product at key completion milestones for monitoring of both quantitative and qualitative progress.

COST CONTROL

Our team members have managed assignments for governmental and private clients throughout southeastern United States and abroad, and we *do so on a regular, ongoing* basis. Cost containment on these design and construction projects is a basic criteria. It is critical to our own future that we maintain a competitive position in the marketplace. That means a constant, careful management of our costs. It is critical that our clients receive projects, which are not only technically sound, but that those projects are performed within strict cost-control objectives for design and construction.

Cost monitoring and control are critical components of the management plan. Standard cost accounting procedures provide our Project Managers with real time data to monitor project costs and keep the work within budget. Deficiencies are noted in a timely manner to allow corrective action.

Discipline leaders will break down work tasks into 80 hours or less elements and have engineering, technicians, and CAD personnel track their hours. This gives the discipline manager quick data on project progress and if adjustments must be made.

Project budgets are distributed to key personnel at the initial meeting and a tracking subnumber established. Budgets are prepared to reflect both labor and expenses. Each project manager is responsible to maintain accurate accounting of time expended with respect to *time budgeted*. Costs are reviewed at each meeting and corrections made to reestablish budgets as required. Invoicing is reviewed by the project manager and submitted in a timely manner to provide accurate and current billings to the client.

If changes in scope arise, they are identified in a manner that is consistent with the terms of the Contract. The client is immediately notified of any change in scope verbally, and subsequently in writing. A description, cost estimate, and schedule are prepared for review by the client. Formal documentation is prepared and submitted to the client, and impact on the schedule is reviewed. New tracking numbers are established for monitoring change in scope items. No work started on out of the scope of work without written approval of client.

To enable our project managers to implement in cost control, we have developed an effective management information system (MIS) for controlling cost. This system consists of four basic elements, which include:

- Timesheet information for team employees is assembled bi-weekly and indicates the work assignment as well as the task on which time was spent.
- Subcontractors are required to submit similar information on a bi-weekly basis, either by computer transfer or by FAX.
- Level of Effort (LOE) and approximate payroll charges to task are compiled bi-weekly.

- Task Managers and subcontractors on a weekly basis provide travel and ODC charges.

TIMELINESS

JSA currently has personnel immediately available to begin work on the County's projects. Our outside consultants have indicated that their workload is also such that they can respond immediately.

JSA and the County will establish a detailed schedule for each project. Each team member will be made aware of milestone dates and discipline interdependency, and the importance of being timely.

The project schedule will detail the steps required and time allotted to each step to complete the project. Depending on the complexity and interdependence of the task items, Critical Path Method (CPM) schedule or simpler bar chart schedule will be developed to establish the sequence and duration of the task items. Whichever scheduling system is chosen, it will be utilized as part of the project management information system for managing all phases of the project.

The schedule will be reviewed at each progress meeting. If any slippage of the schedule is identified, measure will be implemented to reestablish schedule. Available measures include additional labor or extended hours. JSA is dedicated to the County's anticipated schedules.

TYPICAL PROJECT APPROACH

JSA has previously outlined some of the possible project assignments and provided an overview of our Management Control Plan. The actual execution of the typical project provided will generally follow the following approach.

- **Project Initiation:** Upon notice of the task assignment JSA will meet with the County's Project Manager to establish a scope of work and services. JSA will then select the project team members and develop a fee schedule to negotiate with the County. Upon final authorization, JSA will prepare the Project Execution Plan, Communication Plan, QA/QC Program, Cost Control Plan, and finalize the project schedule.
- **Data Acquisition Phase:** During the acquisition phase of the project, JSA/EGS will initiate topographic survey, geotechnical services, and utility locates; gather existing plans and other existing design documentation; and gather other information pertinent to the design project including service area, existing and future population projections, flows, peak factors, etc. The findings of the data acquisition will be submitted to the County for review and comment.
- **Preliminary Design Phase (30% Design):** During the preliminary design phase, JSA will initiate dialogue with regulatory and permitting agencies having jurisdiction and/or permitting empowerment over the project and/or project area. During this phase, hydraulic modeling will be performed, conceptual

designs prepared (30% design drawings); preliminary cost estimates prepared; and the plans and associated documentation submitted to the County for review, comment, and concurrence.

- **60% Design Phase:** Upon receipt of comments or concurrence from the Preliminary Design Review, JSA will make any noted corrections and proceed with design documents to a level of 60% completion including a draft of the project specification and a revised opinion of probable cost.
- **Final Design:** Upon receipt of 60% Design Review comments, JSA will proceed to final design documents including drawings, general and technical specifications, and final opinion of probable cost.

Permitting: Generally, permitting will be performed with 60% or Final Design documents. Certain project elements may be permitted at earlier project stages dependent upon the extent of agency involvement and the time frame to receive permits. JSA will prepare permit applications and supplemental documentation for execution and submittal by the County and will respond to any questions or requests for additional information.

UTILITY ENGINEERING

A. ABILITY OF PROFESSIONAL PERSONNEL

1. TOTAL NUMBER OF PROFESSIONALS WITHIN JSA FOR SUPPORT

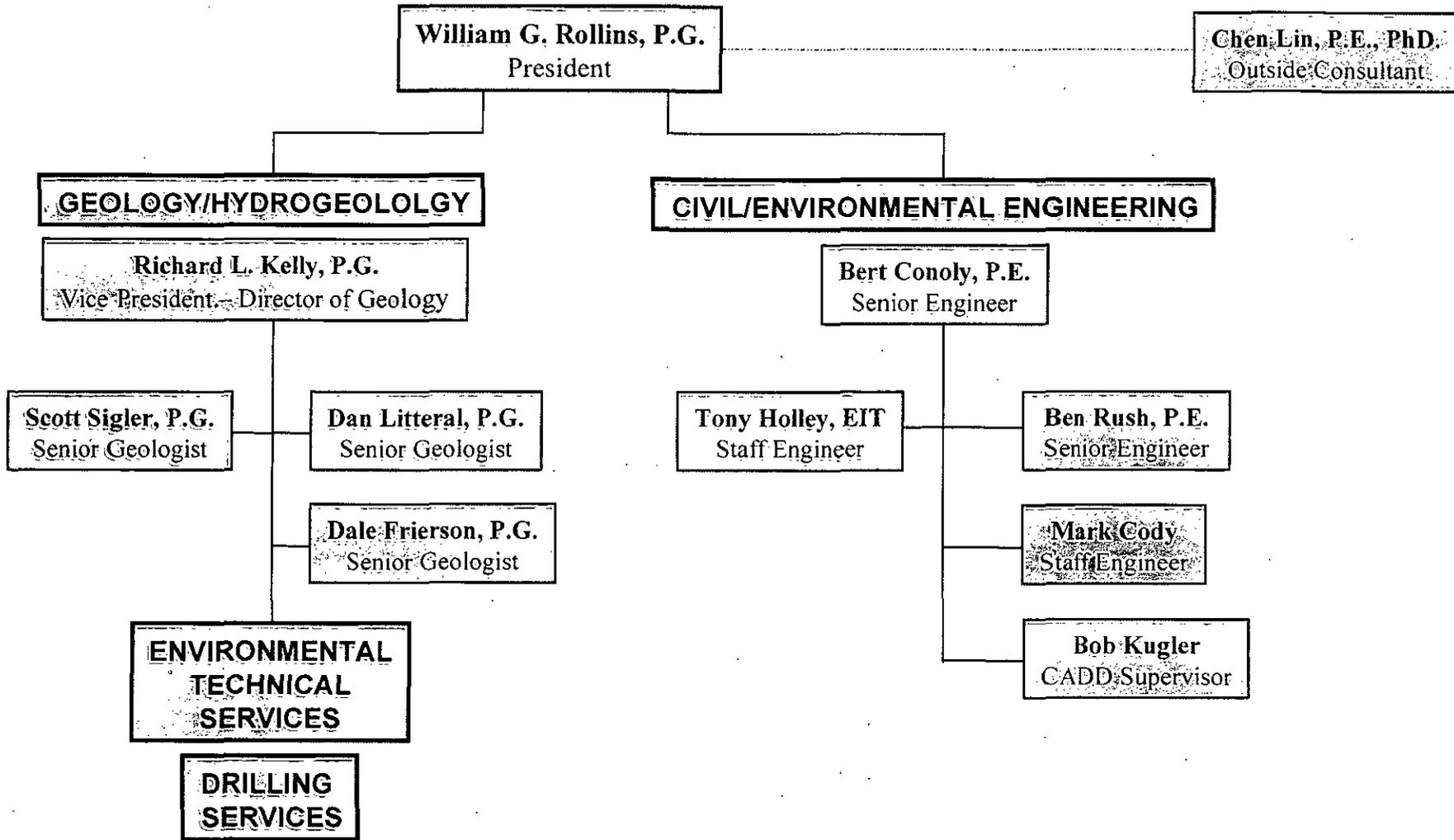
JSA has a team of fourteen (14) Civil and Environmental Engineers, Geologists, Environmental Scientists, Chemists, and environmental technicians with the ability to provide a wide range of utility services. Among these professionals are two (2) Professional Engineers, five (5) Professional Geologists, several staff engineers and a chemical hydrologist. All professional staff are highly experienced with nearly 150 years combined professional experience.

Each professional is not only highly experienced in their respective technical discipline, but also fully trained and capable in project management. This provides a streamlined multi-disciplined management approach that combines technical and managerial training to offer the highest efficacy in project implementation.

JSA also has a full service drilling division with highly experienced licensed well drillers, who work hand in hand with both the client and the overseeing professional who is managing the project.

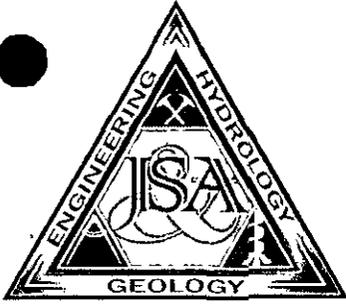
JSA understands that time is of the essence for any project. JSA has the commitment from its management to supply necessary resources to ensure compliance of all regulatory requirements, necessary technical expertise, and timely and cost effective completion of any project assigned to our team. With JSA's broad knowledge base and management philosophy, we are able to direct the necessary resources toward any project we are assigned.

On the following page JSA has provided an organizational chart showing our corporate structure.



2. RESUMES OF KEY PROFESSIONALS

On the following pages JSA has provided resumes for the key personal that will be assigned to any project associated with environmental support services.



BENJAMIN H. RUSH, P.E.

ENVIRONMENTAL ENGINEER

Mr. Rush has over 9 years of experience in environmental engineering support for remedial investigation/feasibility studies and remedial design/remedial action activities for petroleum, hazardous waste, and mixed waste contaminated sites. He has experience with project management; proposal preparation; construction oversight for all civil projects including water, remedial systems, and source removal activities; conducting engineering field inspections to monitor the effectiveness of remedial system operation and maintenance (O&M); assessing the performance of pollution control systems; conducting soil, groundwater, and air sampling; and development of remedial action plans and O&M reports. He also conducts industrial permit compliance monitoring, including monitoring for RCRA and Clean Air Act Title V compliance.

EDUCATION

B.S., Environmental Engineering Sciences; University of Florida

CERTIFICATIONS

Licensed Professional Engineer;
State of Florida

TRAINING/OTHER QUALIFICATIONS

OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZOPER) Training

OSHA 8-Hour Refresher Course (29 CFR 1910.120), annually

Employment History

Jim Stidham & Associates, Inc.,
Senior Engineer,
September 2005 – present

Ecology & Environment, Inc.
Staff/Field Engineer,
November 2003 – August 2005

Northwest Florida Water Management District (NFWFMD),
Staff Engineer,
January 2002 – October 2003

Project Engineer and Manager, Statewide Petroleum Pre-Approval Cleanup Program; Florida

Mr. Rush provides engineering support during remedial action plan development and bidding/proposal development, construction oversight, remedial system start-up, O&M, and troubleshooting at various petroleum contaminated sites. He has designed and operated the following technologies: soil vapor extraction (SVE), in-situ air sparging (AS), bioremediation, in-situ chemical injection, pump and treat, conventional excavation, and large diameter auger (LDA) excavation. At the Kool Beanz site in Tallahassee, he was responsible for the construction oversight of an AS/SVE system with activated carbon, start-up and O&M. He also provided support for remediation action plan development and bidding/proposal documents for City of Tallahassee Wastewater Treatment Plant, source removal by large diameter augers (~\$1 million); Whitaker Oil Company's bulk storage facility, 180 plus well air sparge/soil vapor extraction system (~\$1 million); Coastal Lumber Company, 22,000 plus ton excavation (~\$1.2 million); and over 10 other petroleum contaminated sites ranging from approximately \$250,000 to \$1.5 million.

Contaminated Soil Removal Activities; Northwest Florida

Mr. Rush has conducted source removals of contaminated soils and development of source removal reports for state and local agencies for several private clients. He organizes removal activities with state and local agencies, property owners and contractors. He has experience with equipment operation, so he can perform soil removal, and coordinates the proper disposal of contaminated soil with waste disposal contractors.

Confidential Client; Perry, Florida

For the past 7 years, Mr. Rush has been responsible for the compliance and monitoring of the Confidential Client's RCRA hazardous waste treatment facility operation permit (Open Burn Unit) and the industrial wastewater treatment plant operation permit for their electroplating wastewater treatment process. He conducts soil, groundwater, and particulate sampling and report development in accordance with permits by the Florida Department of Environmental Protection (FDEP) and USEPA Region 4. He assisted in the development of client's RCRA permit renewals,

Benjamin H. Rush, P.E. (Cont.)

which encompasses the entire facility, all approved by FDEP, and significantly reduced the amount of compliance and monitoring criteria for the facility, compared to their previous permits.

Statewide Hazardous Waste Site/Dry-Cleaning Solvent Cleanup Program; Florida

Mr. Rush provided engineering support during the remedial action plan development and bidding/proposal development, construction oversight, remedial system start-up, O&M, and troubleshooting, at various hazardous wastes and dry-cleaning solvent sites throughout Florida. At the Silvex smelter site in St. Augustine, where a very successful groundwater and soil treatment program included the use of bioreactor/biological treatment to result in over 99% contaminant reduction, he performed system O&M, troubleshooting, sampling, and the development of quarterly and annual reports. At the Cinderella Cleaners site in Palm Beach, he performed potassium lactate solution injections, construction oversight on the installation of a soil vapor extraction system, start-up, O&M, and troubleshooting. At the Oak Hill Cleaners site in Jacksonville, he performed construction oversight for the installation of a soil vapor extraction system, system start-up and troubleshooting, and the injection of hydrogen peroxide solution, to address groundwater contamination. He was also responsible for similar activities at ten other sites throughout the state.

Groundwater Remediation System for Harris Corporation; Quincy, Illinois

Mr. Rush provided contaminant evaluation, performed system O&M, troubleshooting, CADD, and general engineering support, to monitor the progress of site remediation. He was responsible for verifying compliance with water and air discharge/emission permit requirements at the Harris Corporation's telecommunication equipment manufacturing facility. This system is a large dual phase extraction system (over 15 extraction wells), for the purpose of removal of chlorinated solvents from the soil and groundwater. He performed oversight of the pneumatic fracturing of the thick clay soils in the contaminated area that enhanced the recovery of chlorinated contaminants.

Patrick Air Force Base (AFB) and Cape Canaveral Air Force Station; Florida

Mr. Rush provided construction oversight, general engineering support, and CADD support for several projects. He provided engineering design support and construction oversight for the removal and installation of oil/water separators, backflow prevention devices, and upgrades to parking/storage containments, under NPDES and SPCC regulations, at multiple maintenance and wash facilities. He provided construction oversight and general engineering support for the management and treatment of deluge water generated during rocket launches at Complex 17A/B. He conducted wastewater source/treatment evaluations and sampling for evaluation of discharges and recommendations to the wastewater treatment plant. He conducted UIC surveys at base facilities for input into FDEP's UIC database and made recommendations for compliance with UIC regulations.

Benjamin H. Rush, P.E. (Cont.)

Surface Water Management Projects; Northwest Florida

Mr. Rush was involved with the permit review and construction of surface water management facilities in northwest Florida. He completed hydrological investigations, hydraulic analyses and flood routing through reservoirs, and technical reviews of engineering designs and environmental reports. He performed on-site inspections during and after facility construction, to ensure adherence to permit conditions related to design and water quality protection. He also addressed water quality issues related to forestry practices, and wetland restoration projects stemming from enforcement cases involving the destruction or alteration of wetland systems.

Additional Engineering Projects; Gainesville, Florida

During college, Mr. Rush provided engineering support, sampling, and CADD services for projects involving geotechnical drilling, soil classification, construction material testing, and laboratory testing for permeability and wet/dry densities. He participated in Phase I and II Environmental Site Assessments and provided on-site coordination with client representatives.



Embert (Bert) Jackson Conoly Jr., P.E.

Principal Engineer

EDUCATION

B.S. Agricultural Engineering,
University of Georgia

CERTIFICATIONS

Licensed Professional Engineer,
States of Florida & Georgia

TRAINING/OTHER QUALIFICATIONS

Forty Hour Hazardous Waste Site
Safety Training meeting
requirements of 29 CFR
1910.120,
Current 8 hour refresher

Employment:

Jim Stidham & Associates, Inc.,
Principal Engineer,
July 2005 – Present

Ecology and Environment, Inc.
Professional Engineer
May 2004 – July 2005

Advanced Environmental
Technologies, LLC.,
Vice President of Engineering,
October 2002 – April 2004

WRS Infrastructure &
Environment, Inc.,
Project Manager
June 2000 – October 2002

Florida Department of
Environmental Protection,
Site Manager,
November 1992 – June 2000

Georgia Power Company
Electric Utility Engineer
August 1981 – May 1992

Mr. Conoly has nearly 30 years professional experience in the engineering and engineering management field. His expertise ranges across several disciplines including the Environmental, Civil, Agricultural, and Electrical Engineering fields. Previous career responsibilities have included design and preparation of engineering submittals including proposals, plans, design documents, record drawings, and reports for civil engineering projects, industrial and environmental permitting, and assessment and remediation of contaminated groundwater and soil at petroleum cleanup sites. Mr. Conoly currently provides Civil/Environmental Engineering services for Jim Stidham & Associates, Inc. (JSA). In addition to his technical expertise, he has managed and supervised technical and professional staff including engineers, geologists, biologists, and project managers. He also has several years of regulatory review and rule making experience as well as client liaison experience with city and county governments, water and electric utilities, FDEP, Water Management Districts, and other regulatory bodies.

Civil/Environmental Engineering

Mr. Conoly currently performs a wide variety of Civil and Environmental Engineering responsibilities ranging from permitting and design to preparing construction proposals, alternative evaluations, construction schedules, and plans, specs, and record drawings for projects. The wide variety of projects he has been responsible for ranges from simple parking lot design and environmental permitting to potable water system design and planning, earthen dam design, and SPCC plans.

Mr. Conoly is the Engineer of Record for approximately 35 miles of 2" to 8" water main for a private, rural water system in Jefferson County. He has been involved in all aspects of planning, design, permitting, funding, and construction of the project including system planning, base mapping of franchise area, hydraulic analyses and system design, rural development grant/loan, FDOT permitting, FDEP permitting, CSX Railroad permitting, Jefferson County permitting, plans/specifications and contract documents, bidding and construction award, contract administration, and construction oversight. The \$3,000,000 project originated in 2006 and was successfully completed in 2010.

He has designed and implemented several construction projects ranging from dam design, permitting, and construction for a local plantation to parking lot modifications for a State Agency.

He also provides complete permitting services for several private clients. He is experienced in permitting mechanisms for The City of Tallahassee, Leon County, North West Florida Water Management District, FDEP, Us Army Corps of Engineers,

03/16/11

Bert Conoly, P.E. (Cont.)

and other entities. Additionally, he is experienced with federal permitting such as SPCC Plans and NPDES Discharge Permits.

Petroleum Contaminated Groundwater and Soil Remediation

For several years Mr. Conoly has designed and implemented Remedial Action Plans (RAPs), as a professional engineer, for sites with petroleum contaminated groundwater and soils in the private sector. He currently provides a wide variety of environmental engineering services related to Petroleum Contamination remediation.

Engineering Design and Management Experience

Technologies and strategies he has used include soil vapor extraction (SVE), in-situ air sparging (AS), bioremediation, pump and treat, large diameter auger (LDA) excavation, chemical oxidation, and conventional excavation. Duties have included preparation and implementation of pilot test plans, cost analysis reports, RAPs, Limited Scope RAPs, remedial alternative analyses, excavation plans, bid packages, etc. In addition to his hands-on technical design and implementation experience, he also has managed a remedial team as Vice President of Engineering for a private consulting firm. His team of seven engineers was very successful in the Petroleum Remediation filed in several states, operating out of four offices in Georgia and Florida.

Regulatory Experience

Mr. Conoly has also served on the regulatory side of the industry as a RAP Reviewer and technical specialist, project manager and supervisor. He served eight years in the FDEP and three years in the privatized FDEP review teams (Teams 5 and 6). He has been involved with literally hundreds of sites in Florida from Key West to Pensacola either as engineer, technical specialist, site manager, regulatory manager, or consultant. He has been involved with rule making, innovative remedial technology evaluation, contractor evaluation and supervision, forensics, and FDEP planning as well as technical review of documents and plans. These engagements entailed the supervision of up to seventeen PEs, PGs, site managers, and administrative staff while acting as project manager for FDEP's Petroleum Cleanup Program site management contract (Team 5). This project was the first instance of FDEP's use of private contractors

Bert Conoly, P.E. (Cont.)

for staff augmentation in the realm of technical review and site management at Petroleum Cleanup sites. Mr. Conoly also acted as liaison between WRS's management team and FDEP's management team overseeing team activities and functions, offering technical support and training for engineering staff, providing final review of work orders, proposals, and invoices, scheduling and managing employee workloads, tracking contract and financial performance, and supervising day-to-day activities.

Contract Manager/Technical Review

In addition to technical review and design responsibilities, for approximately two years Mr. Conoly was responsible for a variety of duties with the FDEP Petroleum Cleanup Program. These duties ranged from contract management (Dade County and Palm Beach County Local Program Contracts), technical review (Technical Support Section) and project management (acting as site manager and lead engineer) in the Preapproval Program. In each of these capacities, he was responsible for providing a wide variety of professional and technical services as well as regulatory review and evaluation/audit duties.

Energy Services Engineer

Mr. Conoly was engaged from 1981 through 1992 in multiple capacities in one of the country's largest electric companies with a variety of increasing responsibilities throughout Georgia. These duties included Energy Services Engineer, Marketing Engineer, and Power Services Engineer. Each position presented challenging opportunities from energy management, HVAC design, lighting and power design to outdoor lighting planning and design, and distribution system planning and engineering. He developed an advanced knowledge of electrical power design, utility operations, and critical customer needs ranging from engineering design to system planning and customer service needs related to commercial and industrial customers.



ROBERT D. FRIERSON

PROFESSIONAL GEOLOGIST

Mr. Frierson has over 10 years of experience in the management of environmental assessment and remediation activities at petroleum, hazardous waste, and mixed waste contaminated sites. Mr. Frierson has served as a project manager with Jim Stidham & Associates, Inc. (JSA) for more than 4 years (including one year from 2001 to 2002). Mr. Frierson previously worked with WRS Infrastructure & Environment, Inc. (WRS) for 6 years. Mr. Frierson began with WRS in the capacity of Staff Geologist and rapidly advanced to a Contract Manager position prior to returning to JSA. He coordinates and manages field investigative and remedial activities and prepares associated deliverables. He also provides job cost accounting, including cost analysis and effectiveness. Mr. Frierson's experience includes project management, proposal preparation; removal and closure of underground storage tanks (USTs); Phase I and II Environmental Site Assessments; source removals; contamination assessments; environmental site audits; monitor well installation, development, and abandonment; sampling of various media; aquifer testing; downhole and surface geophysics; formulation of technical plans and costing; and data reduction and report generation. He has worked within the CERLA, RCRA, USEPA, OSHA, and multiple State regulatory environments.

EDUCATION

B.S., Geology;
Florida State University

CERTIFICATIONS

Registered Professional
Geologist; State of
Florida

TRAINING/OTHER QUALIFICATIONS

US Army Corps of Engineers
Construction Quality
Management for
Contractors

Hands-On Field School for
Petroleum Contamination
Cleanup, University of
Florida TREEO Center

OSHA 40-Hour Hazardous
Waste Operations and
Emergency Response
(HAZOPER) Training

OSHA 8-Hour Refresher
Course (29 CFR
1910.120), annually

OSHA 8-Hour Supervisor/
Management Training

At Jim Stidham & Associates, Inc., Mr. Frierson is responsible for all aspects of Phase I and II Environmental Site Assessments for Commercial Real Estate Transactions. Mr. Frierson has been educated in ASTM Standards E1527-05. In addition, he has been educated on and worked within the 2005 Environmental Protection Agency Rule for All Appropriate Inquiry, 40 CFR Part 312. Mr. Frierson also manages multiple Florida Department of Environmental Protection Petroleum Pre-Approval Cleanup Program site assessments and other non-program contamination assessments under the Florida Department of Environmental Protection's jurisdiction.

Project Manager, John G. Riley Elementary School, Tallahassee, Florida (Contract Value = \$75,000)

Mr. Frierson served as the lead scientist and project manager for the assessment of petroleum and metals impacted soil at this site. Mr. Frierson was responsible for all aspects of the project including proposal preparation, project management, and direct oversight of field activities. A previous consultant identified petroleum and metals impacted soils at the site during the closure of three underground storage tanks (USTs) formerly containing heating oil. During the site assessment, JSA demonstrated contaminants in site soil would not leach to groundwater, thereby eliminating a potentially costly and time consuming groundwater assessment. JSA also eliminated two of the three inorganic contaminants (arsenic and barium) by establishing alternative Cleanup Target Levels for the site. Mr. Frierson also assisted the LCSB with completion of the Initial Notice of Contamination procedures for the site. Following the completion of assessment activities, Mr. Frierson assisted the client with preparation of a Restrictive Covenant and supporting documentation to obtain a Site Restoration Completion Order with Institutional and Engineering Controls.

Project Manager, Private Client, Pre-Development Phase II Assessment, Tallahassee, Florida (Contract Value = \$35,000)

Mr. Frierson served as the lead scientist and project manager for the assessment of chlorinated solvents at a documented former drycleaner site in preparation of proposed development activities. The site was formerly occupied by a drycleaning facility for approximately 10 years and groundwater contamination associated with the former drycleaner had been previously documented. Jim Stidham & Associates, Inc. was tasked with conducting a modified Phase II Environmental Site Assessment to determine the potential impacts to construction based on proposed development plans for the site. Mr. Frierson was responsible

Robert D. Frierson (Cont.)

for all aspects of the project including proposal preparation, project management, and direct oversight of field activities. Mr. Frierson assisted with the development of a soil screening and laboratory analysis plan based on historical building plans, proposed construction drawings supplied by the developers, and the contaminants of concern associated with drycleaning sites. Soil gas sampling (using the AQR Color-Tec® Method) was utilized to screen site soils on a 10-foot grid. Two (2) Color-Tec® colorimetric screening methods were utilized to guide assessment of soil at the site. Soil gas samples were collected to approximate potential areas of concern. Soil matrix samples for analysis by the Color-Tec® colorimetric method were then collected from a range of soil gas sample results in an attempt to provide comparable range of soil matrix results. Confirmatory laboratory soil samples were collected at select Color-Tec soil matrix sample locations for correlation of data and to confirm the presence of chlorinated volatile organic halocarbons (CVOH) detected through analysis of soil gas samples. The subsequent report provided the findings of the limited assessment and recommendations for minimizing the impact of contact with contaminated media during construction.

Project Manager, Private Client, Chlorinated Solvent Assessment, Gainesville, Florida (Contract Value = \$85,000)

Mr. Frierson served as the lead scientist and project manager for the assessment of chlorinated solvents at a former printed circuit board manufacturing facility in Gainesville, Florida. In the late 1980's a fire at the facility resulted in the release of an unknown quantity of tetrachloroethene (PCE) to site soil and groundwater. The site was assessed by various consultants on an intermittent basis from the time of the release through 2008. Jim Stidham & Associates, Inc. was tasked with expeditiously completing site assessment activities due to the prolonged and expensive nature of the assessment to date. Mr. Frierson was responsible for all aspects of the project including proposal preparation, project management, and direct oversight of field activities. Mr. Frierson oversaw the review of historical documentation and assisted in the development for a cost effective and expedient assessment plan to satisfy the requirements for site assessment in accordance with Chapter 62-780, FAC. The AQR Color-Tec® Method for screening of chlorinated volatile organic halocarbon impacted soils was utilized to assess impacts to site soil prior to collection of laboratory analytical samples, thereby reducing in-field labor hours and minimizing the number of laboratory soil samples required. Mr. Frierson worked closely with the client and FDEP to develop an efficient groundwater sampling plan and interim groundwater recovery plan to minimize the offsite migration of chlorinated solvents off-site. Mr. Frierson also assisted the client with completion of the Initial and Supplemental Notice of Contamination procedures for the site. Site assessment and groundwater recovery are ongoing at the site.

Contract Manager, Southern Division Naval Facilities Engineering Command Southeast, Environmental Multiple Award Contract (EMAC); Florida (Contract Value = \$7.2 Million)

As contract manager for WRS's EMAC contract, Mr. Frierson was responsible for a multi-year, \$25 million Indefinite Delivery/Indefinite Quantity (ID/IQ) type contract. In this capacity, Mr. Frierson was responsible for programmatic issues, including client communication and coordination and project execution. He managed eleven delivery orders worth approximately \$7.2 million. Project execution of these delivery orders involved traditional and innovative excavation activities, excavation retainage design assistance, in-situ soil vapor extraction, and groundwater extraction and capping alternatives for the remediation of a variety of contaminants.

Project Manager for various Contract Task Orders (CTO) issued under the EMAC; Florida

Robert D. Frierson (Cont.)

As project manager for WRS, Mr. Frierson's responsibilities included preparation of work plans/cost estimates, project management, and quality control of the services, including: contamination assessment, remedial action, remedial action implementation, environmental assessment, storm water management, storm water infrastructure design/repair and replacement, waste management, waste characterization and profiling, and transportation and disposal. He was also responsible for creating proposals, generating waste management plans, generating sampling and analysis plans, storm water pollution prevention plans, environmental protection plans, communicating with regulatory agencies, client communication, and project management of other selected projects outside the EMAC program. He frequently interacted with local and federal regulatory agencies, such as the United States Environmental Protection Agency, the Florida Department of Environmental Protection, and the Florida Department of Health.

Project Manager, Naval Station Mayport, Solid Waste Management Unit 15 (SWMU-15); Mayport, Florida (Contract Value = \$350,000)

Under the WRS EMAC contract, Mr. Frierson oversaw the construction of a 5,200 square foot Resource Conservation and Recovery Act (RCRA) cap and associated dry storm retention pond. He was responsible for proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Project Manager, Naval Station Mayport, Solid Waste Management Unit 17 (SWMU-17); Mayport, Florida (Contract Value = \$15,000)

Mr. Frierson oversaw the construction of a Resource Conservation and Recovery Act (RCRA) cap, under the WRS EMAC contract. He was responsible for proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Project Manager, Naval Air Station Jacksonville, Potential Source of Contamination 46 (PSC-46), Defense Reutilization and Marketing Office (DRMO); Jacksonville, Florida (Contract Value = \$800,000)

Site activities included demolition, transport and disposal (T&D) of over 450 tons of concrete cover; excavation, segregation, and load-out of over 1,100 tons of Ra-226 impacted soil and point sources; excavation, segregation, load-out, and T&D of over 2,100 tons of non-hazardous soil; excavation, segregation, load-out, and T&D of over 350 tons of hazardous soil; and T&D of approximately 19,300 gallons of non-hazardous petroleum contact water. Personnel provided quality control oversight for the performance of all MARSSIM final status surveys and the collection of 56 confirmatory soil samples. The soil samples were analyzed for Ra-226 and the Ra-226 decay series. Mr. Frierson was responsible for the proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Project Manager, Naval Air Station Whiting Field, AVGAS Pipeline Section E; Milton, Florida (Contract Value = \$1.6 Million)

This project included the design and installation of excavation shoring, conventional excavation of petroleum impacted soils, transport and disposal of site soils impacted by aviation gasoline and other petroleum products, and the installation and post remedial monitoring of groundwater monitoring wells. Mr. Frierson was responsible for the proposal and cost estimate production, overall project management, cost control and change order negotiation, project implementation, project submittals, and project completion reporting.

Robert D. Frierson (Cont.)

Lead Scientist, Outlying Landing Field (OLF) Bronson, Site 1116; Pensacola, Florida

Mr. Frierson served as Lead Scientist and Assistant Project Manager for the supervision of source removal and post remedial monitoring activities associated with the OLF Bronson, Site 1116 project. Responsibilities included the collection and tracking of geotechnical and analytical soil samples; guidance and oversight for source removal by conventional methods; installation, development, and sampling of groundwater monitoring wells; data reduction; generation of a Project Completion Report and Quarterly Monitoring Reports; cost tracking; project implementation; and project submittals.

Lead Scientist, Outlying Landing Field (OLF) Bronson, Site 1107; Pensacola, Florida

Mr. Frierson served as Lead Scientist for the supervision of source removal and post remedial monitoring activities associated with the OLF Bronson, Site 1107 project. Responsibilities included the collection and tracking of geotechnical and analytical soil samples; guidance and oversight for source removal by Large Diameter Auger rig; installation, development, and sampling of groundwater monitoring wells; data reduction; and generation of a Project Completion Report and Quarterly Groundwater Monitoring Reports.

Lead Scientist, FDEP Hazardous Waste and Chlorinated Solvent Cleanup Program Contract; Florida

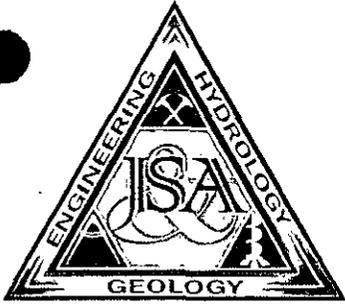
Mr. Frierson served as Lead Scientist for the supervision of assessment and monitoring activities associated with the FDEP Hazardous Waste Site Dry-cleaning Solvent and Petroleum Cleanup Programs. These activities included operation and maintenance of treatment systems; chlorinated solvent site assessments; monitor well installation, development and abandonment; groundwater sampling; surface water sampling; sediment/soil sampling; natural attenuation sampling; data reduction; and site assessment report generation. Global Positioning System (GPS) technology was used during site investigations to locate environmental sample locations and site map production.

Project Manager/Lead Scientist, FDEP Petroleum Preapproval Program Contract; Florida

Mr. Frierson served as Project Manager/Lead Scientist for the assessment of petroleum-contaminated sites in Florida and South Georgia for clients including FDOT, FDEP, and GAEPD from November 2001 to November 2002. He was responsible for the management of subcontracted field crews, soil boring and monitor well installation, soil and groundwater sample collection and *aquifer characterization*, and FDOT right-of-way permit acquisition. He prepared and reviewed Contamination Assessment Reports (CARs) and Remedial Action Plans (RAPs) for petroleum sites in Florida, pursuant to Chapter 62-770, FAC, and hazardous waste sites for public and private clients. Projects have included Pug's Beer & Wine, C&T Variety, and Planter's Exchange, as well as private clients.

Geologist, FDEP Geological Survey; Tallahassee, Florida

Mr. Frierson has assisted in the production of geologic maps of the state of Florida. The production of these maps included the collection of lithologic, topographic, and hydrologic data in the field; interpretation and data reduction; installation of surficial aquifer monitor wells; collection and logging of lithologic cores; and field mapping of geologic exposures.



RICHARD KELLY, P.G.

VICE PRESIDENT

GEOLOGY / DRILLING

With over 17 years experience with JSA in the environmental field, and over 28 years experience in the water well and monitor well installation field, Mr. Kelly serves as both the head of JSA's Drilling Division and as a JSA environmental project manager. As head of JSA's Drilling Division, Mr. Kelly coordinates all drilling activities, ensures property conditioning of equipment, and manages all drilling personnel. Mr. Kelly is responsible for drilling proposal preparations, drilling scope preparation, drilling quality control, and drilling invoicing. He is also involved in the development of drilling clientele. Mr. Kelly is also in charge of the management and operation of the Failing F-7 Auger/Rotary drill rig, the Mobil B61 HD drill rig, and the AMS 9600 PRO Series Direct Push Drill Rig, during the installation of monitor wells and soil borings. Mr. Kelly's project management duties consist of supervising and coordinating contamination assessment activities, including soil, water, and air sampling projects; installation of monitoring wells and soil borings; and report preparation, including test analysis, groundwater flow analysis, and figures. He performs groundwater modeling to help determine the most effective remediation system, and prepares remedial action reports. His other duties at JSA include the oversight and management of JSA's Preapproval Cleanup Program for FDEP sites.

EDUCATION

B.S., Geology;
Florida State University
A.A., Business Studies;
Florida Community
College of Jacksonville

CERTIFICATIONS

Licensed Professional Geologist,
State of Florida
Licensed Water Well Contractor,
State of Florida

MEMBERSHIPS

National Groundwater Association
Florida Groundwater Association
National Drillers Association

TRAINING/OTHER QUALIFICATIONS

Princeton Remediation Course

40-Hour Hazardous Waste Site
Safety Training to meet the
requirements of 29 CFR
1910.120, Current 8-Hour
Refresher

EMPLOYMENT HISTORY

1994-Present: **Jim Stidham &
Associates, Inc-
Geologist/Principal**
1993-1994: **United States
Geological Survey:
Scientific Tech**
1983-1990: **Jones Well Drilling,
Inc.: Water Well
Contractor**

PROJECT MANAGEMENT HISTORY

Florida State University; Tallahassee, Florida

Since the late 1990's, Mr. Kelly has performed numerous petroleum tank removal/closures, assessments, and remediation activities for Florida State University. These activities included project management for the removal of underground storage tanks (USTs) for over 10 sites on the FSU main campus and on remote FSU campus locations. Tank removal activities included contracting and managing qualified licensed Petroleum Contractors to remove the USTs, performance of a Tank Closure Assessment for each site, and submittal of a completed Tank Closure Assessment Report for each UST removal site. Mr. Kelly has also been responsible for the performance of several petroleum contamination assessments on the FSU Campus. These included 7 UST related contamination assessments that required extensive soil and groundwater assessment activities through the installation and sampling of soil borings and monitor wells. These assessments also included area and regional potable well impact assessments and area geological studies. A "No Further Action" was obtained from the Florida Department of Environmental Protection for all 7 sites. Mr. Kelly was also the project manager for 2 FSU petroleum impacted sites that were funded by the FDEP Preapproval Cleanup Program (through the Inland Trust Protection Program). Both of these sites (the Doak S. Campbell Stadium and the FSU Booster House) involved extensive soil and groundwater assessment activities. Mr. Kelly prepared and executed source removal remedial action plans for both sites that resulted in a "No Further Action" from the FDEP. Other projects directed and executed by Mr. Kelly on the FSU campus are an emergency tank removal and large source removal at the FSU President's House that also resulted in a "No Further Action". Mr. Kelly has

Rick Kelly, P.G. (Cont.)

also performed several Phase II assessments in areas of suspected chemical discharges on the FSU Campus. He has also served as a project manager for the design and installation of aboveground storage tanks for Florida State University.

Florida Department of Management Services (FDMS)

Since the early 1990's, Mr. Kelly has served as a project manager for several FDMS projects. These projects have included tank closure assessments, contamination assessments, petroleum tank design and installations, remedial action plan preparation and execution, and the assistance in construction design and oversight. Mr. Kelly has been responsible for the removal of underground storage tanks at several FDMS buildings that include 2 sites that facilitate FDEP buildings. Mr. Kelly was responsible for the removal of a UST at the FDEP Northwest District Building in Pensacola, which also included a site assessment, source removal, and a monitoring only plan, that subsequently resulted in a "No Further Action" at this site. He also directed and managed the installation of a replacement emergency aboveground storage tank at this site. Mr. Kelly performed a contamination assessment for the FDEP Twin Towers Building in Tallahassee, Florida that resulted in a "No Further Action". Additionally, Mr. Kelly responded to 2 releases of ethylene glycol for the Southwest Florida FDEP Building in Ft. Myers, Florida. Through an extensive monitoring plan, Mr. Kelly was able to perform a site closure for these spills and obtained a "No Further Action". He also performed an emergency assessment due to the discovery of an unknown acid reduction vault at the FDLE Forensics Laboratory in Orlando. Through assessment and monitoring activities, a "No Further Action" was also obtained for this facility.

Florida Department of Environmental Protection (FDEP) Preapproval Cleanup Program

Since 1995, Mr. Kelly has served at JSA as a project manager for the assessment and remediation of numerous petroleum contaminated sites through the FDEP Preapproval Program. He also has served as a project manager for over 30 FDEP Preapproval Cleanup sites. Mr. Kelly has obtained Site Rehabilitation Completion Orders (SRCO) for over 10 FDEP Preapproval Cleanup sites. Mr. Kelly has experience and knowledge of the FDEP's Preapproval Program and has a good working relationship with the FDEP regulators in the FDEP Main Office (Tallahassee), the Northeast FDEP District (Jacksonville), the FDEP Northwest District (Pensacola), the FDEP Central District (Orlando), the Southwest FDEP District (Tampa), and with several State of Florida County FDEP Agencies. Mr. Kelly frequently attends FDEP sponsored contamination assessment and remediation workshops to stay current on the FDEP and Federal requirements.

FDEP Preapproval Cleanup Program: Quincy Farms Site; Quincy, Florida

Among the numerous FDEP Preapproval Cleanup sites that Mr. Kelly has managed, the Quincy Farms facility was an extensive and notable site. In the late 1990's, Mr. Kelly directed the assessment of a petroleum release from a UST at the Quincy Farms site (a large mushroom production and packing facility). In 1999, a large source removal was planned and directed by Mr. Kelly, which resulted in the removal

Rick Kelly, P.G. (Cont.)

and proper disposal of over 900 tons of petroleum contaminated soil. Upon the completion of source removal, Mr. Kelly designed and installed a Bio Air Sparge System to cleanup the groundwater. This system was operated for a 1-year period until the groundwater was remediated. The site was then placed into a 1-year post remediation sampling plan that revealed the groundwater was successfully remediated. The site was issued a Site Rehabilitation Completion Order (SRCO) in 2006.

Sarasota County Government; Sarasota, Florida

Since 1998, Mr. Kelly has developed and maintained a professional relationship with officials from the Sarasota County Government. This relationship resulted in the selection of JSA to perform the assessment and remediation of all Sarasota County petroleum storage facilities. Mr. Kelly has directed and performed the removal of underground storage tanks at several of the Sarasota County facilities, including the Sarasota County Courthouse, the Criminal Justice facility, the Central Energy Plant, the County Jail, and the County Health Department. Mr. Kelly performed and directed contamination assessments and remediation activities at the Historical Sarasota County Courthouse and the Sarasota County Jail sites. Site Rehabilitation Completion Orders were obtained for both sites. Mr. Kelly was responsible for placing 5 Sarasota County sites into the FDEP Preapproval Program. Mr. Kelly is currently directing a Monitoring Only Plan (MOP) at one of these facilities (the Sarasota County Area Transit), while the remaining 4 sites are awaiting FDEP funding. Mr. Kelly was also involved in the construction design and project management for the installation of 4 aboveground storage tanks for the Sarasota County Government.

Tallahassee Memorial Hospital; Tallahassee, Florida

Since 1998, Mr. Kelly has served as JSA's project manager for the assessment and remediation of all of the petroleum facilities at the Tallahassee Memorial Hospital. Mr. Kelly was responsible for the assessment of a petroleum release associated with two 20,000 gallon diesel USTs that supplied emergency power for the TMH Power Plant. Mr. Kelly obtained a conditional SRCO for this release. In 2001 and 2002, Mr. Kelly directed the removal of these USTs to facilitate the construction of the new Bixler Emergency Wing. Mr. Kelly also served as a consultant to the TMH Engineering Division concerning the installation of two 15,000 aboveground storage tanks for the emergency operations of the TMH Power Plant. He performed contamination assessments for the emergency room site and the Psychiatric Facility. Both of these sites received SRCO's from the FDEP. Mr. Kelly has also responded to 2 emergency responses of petroleum releases at the TMH facility.

Citizen's Bank of Perry; Perry, Florida

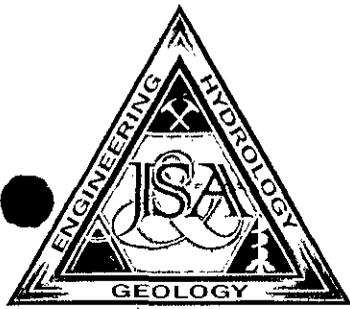
Mr. Kelly was responsible for the contamination assessment and remediation of a tetrachloroethene (PCE) plume at the current property of the Citizen's Bank of Perry in Perry, Florida. In 1998 and 1999, Mr. Kelly directed and performed a large site assessment to delineate this PCE plume. In 1999 and 2000, Mr. Kelly designed and installed an air sparge/vapor extraction system to remediate this plume. Mr. Kelly was able to reduce the PCE plume to concentrations low enough to facilitate the

Rick Kelly, P.G. (Cont.)

construction of the current bank building. Mr. Kelly placed the facility into a monitoring plan and was able to obtain a conditional closure for this site from the FDEP Northeast District.

JSA's Drilling Division; Tallahassee, Florida

Prior to 1997, all drilling services for the site assessment and remediation activities for JSA were performed by subcontractor drilling services. As Mr. Kelly had extensive experience in the drilling field, he coordinated and created JSA's In House Drilling Division. Since 1998, JSA's In House Drilling Division has expanded to include 2 drill rigs (a Failing F-7, capable of installing monitor wells and water wells to depths of 1000 feet, and a Mobil B61HD, for shallow [<150 feet] monitor well installation). In 2000, Mr. Kelly also expanded JSA's drilling services to include direct push technology (DPT) drilling services by including an AMS 9600 PRO Series DPT rig. Other drilling equipment includes two DSI Grouters for well abandonments, 3 support trucks and 4 support trailers, steam cleaners, and extensive construction equipment (cut saws, core machines, jack hammers, etc.). JSA's Drilling Division includes 6 State of Florida Licensed Water Well Contractors and an experienced support staff. Also in 2000, Mr. Kelly expanded JSA's Drilling Division to provide drilling services for outside clients. JSA's Drilling Division Client list includes several prominent consulting firms such as: Levine Fricke, WRS, Black & Veatch-Special Projects, Fortis Environmental, Dick Environmental Services, Enviro-Logical Solutions, and several state agencies, such as: the Florida Department of Environmental Protection, the Florida Department of Agriculture, the Florida Department of Corrections, and the Florida Department of Management Services.



SCOTT SIGLER, M.S., P.G.

Senior Geologist / Hydrologist

Mr. Sigler has over 13 years experience in water quality programs including the coordination and design of investigative research, sampling strategies, supervising field collections, data analysis, interpretation and report preparation. Currently supervising programs to determine geologic and hydro-chemical profiles of ground and surface waters, he is also a consultant in the development of research models, environmental permitting, and site assessment. Primary responsibilities at Jim Stidham & Associates, Inc. include Project Management, evaluating data collection methods to be employed in research projects, oversight of field collections, hydrologic profiling, sample analysis, and the synthesis of data derived from field surveys. Mr. Sigler has also been trained in wetlands delineation and heads the wetlands program at JSA. Prior to employment with JSA, Mr. Sigler was an integral member of the Operations team that opened Disney's Animal Kingdom theme park at Walt Disney World. In that role Mr. Sigler established the standard operating procedures and water quality standards for care of the multiple aquatic features present within the park. Mr. Sigler has consulted on water quality issues for marine and fresh water fish, marine mammals, aquaculture, recreational attractions and bottled water.

EDUCATION

M.S., Chemical Oceanography,
Florida State University

B.S., Geology, Florida State
University

A.A., Business Studies,
St. Petersburg College

MEMBERSHIPS

American Institute of Professional
Geologists

National Groundwater Association

Geological Society of America

TRAINING/OTHER QUALIFICATIONS

Professional Geologist in the State
of Florida. P.G. #2471

38 Hour ACoE Wetlands
Delineation & Management
Certified

16 Hour Florida Statewide (62-
340) Wetland Delineation
Training

40 Hour Hazardous Waste Site
Safety Training meeting the
requirements of 29 CFR
1910.120

USCG Small Craft Operation and
Navigation Certificate.

Project Highlights:

Unpermitted Regulated Waste Site: Site Assessment Investigation / Waste Clean Up Performed in response to Consent Order by the Florida Department of Environmental Protection (FDEP) in accordance with 62-780.600 F.A.C. The purpose of the SAR was to assess the type and extent of un-permitted waste deposited as fill material within a Sand Borrow Pit, investigate possible environmental hazards from chemical discharge in soil, sediment, surface water and groundwater, potential receptors of their migration, and support of proposed courses of action at an active mining facility in Leon County, Florida. Subsequently, a Waste Removal Plan has been submitted for approval following Consent Final Judgment with FDEP.

Ace Salvage: Site Assessment Report Performed in response to Consent Order by the Florida Department of Environmental Protection (FDEP) in accordance with 62-780.600 F.A.C. The purpose of the SAR was to investigate possible environmental hazards from petroleum releases caused by improper storage and handling of fluids associated with car crushing and recycling at a metal recycling facility in Gadsden County, FL. Research examined discharge in soil, sediment, surface water and groundwater, potential receptors of their migration, and support of proposed courses of action at an facility. An interim source removal has been performed. Site Assessment is ongoing.

Chattahoochee Landfill: Site Assessment Report Submitted pursuant to a request by the Florida Department of Environmental Protection (FDEP) in accordance with 62-780.600 F.A.C. The purpose of the SAR is to assess the type and extent of contaminants within the various media present at the site, their source, potential receptors of their migration, and support of proposed courses of action at a closed Class II Sanitary Landfill near Chattahoochee, Gadsden County.

Unpermitted Regulated Waste Site: Waste Clean Up Performed in response to Consent Order by the Florida Department of Environmental Protection (FDEP) in accordance with 62-701 F.A.C. The purpose of the waste cleanup project was to remove regulated household wastes from a sensitive ecological steep-head wetland along the Apalachicola River in Gadsden County. Permits for Wetland impacts were sought and approved by FDEP and U.S. Army Corps of Engineers. 892 Total tons requiring 85 truck loads were removed during the three week excavation. Waste from the site was distributed to appropriate receiving facilities at Decatur County Landfill in Bainbridge, GA, and Liberty County Landfill in Florida. Three loads of tires, weighing 18 tons, were recycled at Barber Fertilizer Company of Bainbridge, Georgia. Wetland disturbance was less than proposed.

Ridge Citrus Fertilization Best Management Practice Verification Study This project, funded by the Florida Department of Environmental Protection (FDEP), is being conducted in coordination with the Florida Department of Agriculture and Consumer Services (DACCS) and the University of Florida's Institute of Food and Agricultural Sciences (IFAS). JSA was selected to provide the preliminary field reconnaissance for site selections, installation of new monitor well technologies, nested well placement, and quarterly collection of groundwater samples. Mr. Sigler generated the Quality Assurance Project Plan and serves as the JSA Project Manager overseeing the field processes of site selection, well installation, sample collection, data acquisition and the submission of deliverables to the participating agencies.

Freshwater Springs Hydrology and Geochemical Character Determination: Assisting with prospecting efforts and regulatory documentation, Scott regularly provides consultation for local and national entities on springs classification, potentiometric surface mapping, Semi-annual hydrology and consumption logs for District agencies, and meeting the requirements for bottled water standards per 21 CFR 165.110.

Surface and Groundwater Interaction Investigation: Lake Lochloosa and Orange Lake – This study, performed under direction from the Florida Department of Management Services (DMS) and FDEP, examined the groundwater pathway as a conveyance for enriching nutrients and evaluated how natural nutrient levels in the aquifer matrix, and anthropogenic sources such as septic tanks, may be related to nutrient loading within the Orange Lake basin. The work completed during the study involved the identification of current and historic land uses for qualification of loading types, examination of soil lithology and surficial aquifer units throughout the region by Direct Push Techniques (DPT), and the collection of representative soil and groundwater samples for laboratory analysis. Mr. Sigler generated the Quality Assurance Project Plan and served as the JSA Project Manager overseeing the processes of authorized access to public and private land, geological site characterization, sample collection, data acquisition and the submission of deliverables to the participating agencies.

Multi-well Aquifer Test and Geophysical Well Inspection – A Hydrogeological investigation was conducted for a growing coastal development community in the Florida panhandle. The objective of the investigation was to improve the knowledge of the Shallow and Intermediate aquifers, particularly with respect to the degree of hydraulic interaction between the two aquifers and the potential for impacts to area wetlands as a result of authorized withdrawals. Geophysical logs of natural gamma radiation were recorded to determine depth and thickness data of the aquifers and confining beds. Separate pumping tests were performed to determine horizontal conductivity of the two aquifers. Mr. Sigler served as the JSA Project Manager interacting with government agencies, overseeing piezometer installation, pumping test and data acquisition and the submission of deliverables to the participating agencies on behalf of the client.

Hydrogeological Investigation: Pumping Test and Spring Adjacency – A geologic investigation, characterizing the hydrogeologic, chemical and physical properties of a Florida panhandle spring and its associated source aquifer, was conducted on behalf of Nestle Waters of North America. The work consisted of conducting multiple soil borings by DPT to identify water bearing formations and confining strata, the installation of piezometers throughout the basin, construction of a pumping well, development of a static weir at the spring head and performing a pumping test. Water samples were also collected from the spring and aquifer for

comparison of chemical characteristics. The goal of the study was to improve the knowledge of the spring and aquifer, particularly with respect to the degree of hydraulic connectivity between them. Mr. Sigler served as the JSA Project Manager overseeing the field processes of lithologic description, piezometer installation, sample collection, pumping test and data acquisition and the submission of deliverables to the client.

Regulatory Groundwater Observation and Compliance Monitoring – Mr. Sigler has a thorough working knowledge of the state regulations for groundwater monitoring of Landfills, Waste Water Treatment, and agricultural Best Management Practices (BMPs). He coordinates schedules and manages events supporting Discharge Monitoring Reports for waste water treatment facilities, semi-annual reporting for Landfills and compliance monitoring for land development. Through this experience he has developed an excellent rapport and working relationship with FDEP, DACS, Water Management Districts and Local Government agencies throughout Florida. JSA conforms to the Florida Department of Environmental Protection's (FDEP) Comprehensive Quality Assurance Plans (CompQAP) standard operating procedures for reporting and analysis.

Wetland Impact Permitting – Following the landfall of Hurricane Ivan, near the border of Florida and Alabama, the coastal development project of Trustmark South, in Gulf Shores, Alabama was significantly impaired by storm deposits and environmental damages. Mr. Sigler was able to coordinate with Army Corps of Engineers staff and the Alabama Department of Environmental Management to obtain a Nationwide Permit and mitigation credits for unavoidable wetland impacts allowing clean-up and development to resume.

In a separate project in the Florida panhandle it was determined that significant excavation would be necessary to remediate illegal dumping in a timber forest near Chattahoochee, FL. Mr. Sigler successfully negotiated FDEP wetlands permitting and Army Corps Nationwide Permits under a Joint Application for Work in the Waters of Florida on behalf of the client. This permit allowed limited impacts to wetland areas and the use of heavy machinery.

Florida Department of Environmental Protection-Preapproval Cleanup Program. Mr. Sigler has served at JSA as a project manager for the assessment and remediation of numerous petroleum contaminated sites through the FDEP Preapproval Program.

Hilltop Grocery Store: This former filling station was converted to a local grocery and deli after removal of gasoline UST's. The groundwater contamination plume at this site extended down gradient from the source area. Soil contamination extended off site and down to the water table at a depth of 50 feet. Investigation of the soils was conducted by Direct Push Techniques and continuous spooning by hollow stem auger. Five groundwater monitor wells were installed for determination of groundwater impacts and characteristics. A Template Site Assessment Report was generated as required by the FDEP work order.

The Pantry – Lake Jackson: This active filling station and convenience store reported leaking underground storage tanks and was accepted into state funded cleanup. Investigation of the soils determined that contamination was restricted to the site and contained in the vadose soils. Investigation of the soils was conducted by Direct Push Techniques. Six groundwater monitor wells were installed within and around the soil plume for determination of groundwater impacts and characteristics. A Template Site Assessment Report was generated for Southwest Georgia Oil Company, as required by the FDEP work order. A vapor extraction test is being developed for the site.

Wakulla County - Old Sheriff's Office: This former Sheriff's substation utilized a single underground tank and associated dispenser for fueling its fleet. Upon closure of the tank it was determined that an unknown volume of unleaded fuels had been released during its active use. A Limited Contamination Assessment Report has been provided to the state on behalf of Wakulla County. Investigation of the soils was conducted by Direct Push Techniques and continuous spooning by hollow stem auger. Seven water table wells and a deep groundwater monitor well were installed for determination of groundwater impacts and characteristics. The site has been accepted into the PCPP following this investigation.

Aquatic Life Support Operations – As an Operations Manager with the Walt Disney World Company Mr. Sigler was responsible for developing, implementing and supervising the daily operation of water treatment systems, field sample collections, laboratory analysis, and report generation for aquatic environments within Animal Programs. His further responsibilities included acting as the chemical safety officer, a hazardous materials response team member, the development of chemical hygiene plans, operational guideline documents, and consulting on corporate policy regarding water use in recreation, animal husbandry, discharge, and conservation.

Nutrient Analysis of Apalachicola Bay – This research project was directed at monitoring anthropogenic effects on nutrient mass balance in and around the Apalachicola Bay and river estuary. Monthly sample events were conducted to examine water column profiles for major nutrients, clarity, in-situ baseline parameters, sunlight intensity, salinity, and phytoplankton productivity. Mr. Sigler served in this project as a logistics coordinator, field participant and data QAQC reviewer.

Florida Aquatic Ecosystem Mercury Cycling & Modeling Project – During this intensive field and laboratory research examining the pathways of heavy metal contamination in a limnologic ecosystem Mr. Sigler was a project manager. Mr. Sigler coordinated field activities, supervised the scientific SCUBA team, coordinated sampling logistics, reviewed data QAQC, and generated deliverables to the funding agencies. The project investigated water column and pore water profiles, sediment accumulation rates, and benthic flux. Groundwater and sediment geochemistry were analyzed to develop a history of mercury deposition to lake sediments.

Employment:

Jim Stidham & Associates, Inc., Tallahassee, Florida, Senior Geologist.	June 2004 – present
Walt Disney World Co. Disney's Animal Kingdom., Orlando, Florida, Aquatic Chemist.	Dec 1997 – June 2004
The Florida State University, Department of Oceanography, Graduate Research Asst.	Jan. 1994 – Dec. 1997



WILLIAM G. ROLLINS, P.G. Hydrogeology/Environmental President

EDUCATION

Masters Studies, Florida State
University
B.S., Geology, Columbus State
University

CERTIFICATIONS

Licensed Professional Geologist,
States of Alabama, Florida,
and Georgia
Licensed Water Well Contractor,
State of Florida
Licensed Real Estate Sales
Associate, State of Florida

TRAINING/OTHER QUALIFICATIONS

Forty Hour Hazardous Waste Site
Safety training meeting
requirements of 29 CFR
1910.120,
Current 8 hour refresher

University of North Florida
Environmental Assessment
Training Course.

University of Florida, Computer
Model Training
(MODFLOW)

NGWA PEST Model Calibration
Training

NGWA The MODFLOW Course

NGWA Visual MODFLOW
Advanced Training

EMPLOYMENT HISTORY

Jim Stidham & Associates, Inc.
1985-Present

With over 25 years of work experience at Jim Stidham & Associates, Inc., Mr. Rollins has completed projects throughout the Southeastern United States and Bahamas. Mr. Rollins has been directing hydrogeological investigations in Florida, Georgia, Alabama, and Mississippi since 1985. Primary responsibilities at Jim Stidham & Associates, Inc. include hydrogeologic assessments (including multi-well aquifer testing, saltwater upconing modeling, single well aquifer tests, and the securing of consumptive use permits for water wells), groundwater contamination studies, Phase I and Phase II Environmental Assessments, computer modeling of groundwater and contaminant transport, and remedial action studies. Investigation sites include projects across central and north Florida, Georgia, Alabama, and Mississippi. His primary duties include project management, site investigation, quality assurance/quality control, computer modeling, data analysis, and report writing.

St. James Bay, Franklin County, Florida. For this large development, which included an 18 hole golf course, Mr. Rollins was responsible for determining consumptive use impacts to the Floridan Aquifer from the development of potable use supply wells and also the consumptive use impacts resulting from the use of surface water sources for irrigation of the proposed golf course. This work included multi-well aquifer testing and analysis to determine hydrogeologic parameters of the aquifers. This data was used for model input for Visual Modflow which was then calibrated to predict aquifer impacts and saline intrusion potential of the Floridan Aquifer and nearby users. Project tasks included analysis of previously performed multi-well aquifer tests, saltwater interface wells, wetlands monitoring, short-term/long-term pump tests, step pump tests, groundwater modeling, data analysis, and water quality analysis. The final permit provided sufficient resources for the client with minimal impact to the environment.

Northwest Florida Water Management District, Tate's Hell Floridan Aquifer Study. This work consisted of a multi-year study of the groundwater resources of the Tate's Hell Wildlife Management Area of Franklin County, Florida. Work consisted of coordinating with District personnel in development of an exploration program, development of well construction specifications for a multi-well aquifer testing program, coordination with well drillers, oversight of well construction, chemical and physical data collection, short term pump testing, oversight of well development/geophysical logging/well completion, performance of 8 to 72 hour pumping tests including use of automatic data loggers, and coordination with District personnel in data interpretation. Tasks completed as a part of this project included specific capacity tests, groundwater sampling, saltwater interface wells, and aquifer performance testing.

William G. Rollins, P.G. (Cont.)

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Private Client, St. James Island Hydrogeology Study, Franklin County, Florida. Mr. Rollins led the JSA team to help develop an aquifer resource investigation plan in order to assess the water resources of St. James Island. The purpose of this work plan was to perform a detailed research of available hydrogeological data, review this data, and provide a program for acquiring additional hydrogeological data across St. James Island in order to determine the available water resource potential of the island.

The initial part of this study consisted of a historical research of Franklin County hydrogeology and identified a total of four Aquifer Performance Tests which have been performed within St. James Island. These comprehensive tests provide the most detailed aquifer information for this region including aquifer production information, local lithology, and in some cases, depth to the salt water interface. As a part of this project, local and regional historical work was researched, categorized, and plotted using a geographical information system to identify existing well locations and available chemical data (chlorides).

An aquifer investigation program was developed for the Floridan and Surficial Aquifers. This proposed program consisted of a series of aquifer performance tests, geophysical logging, chemical testing, and saltwater interface determination borings..

Well Field Development, East Point Water and Sewer District, Florida.

For the Eastpoint Water & Sewer District, Mr. Rollins provided well construction oversight and testing of the Floridan Aquifer north of Highway 98 in western Franklin County. This testing, and the associated data analysis, is part of the expansion of the existing well field for the Water District. The initial work consisted of the installation of a saltwater interface well, a Floridan aquifer test well, Floridan aquifer observation wells, installation of a surficial aquifer well, along with performance of a 72 hour aquifer pump test.

Model development and resource analysis will be focused towards satisfying the requirements for the consumptive use permit application process as specified by the Northwest Florida Water Management District (NFWFMD)..

Well Specification and Construction Oversight/Aquifer Testing/ Consumptive Use Permitting for Florida Agricultural and Mechanical University, Tallahassee, Florida. Since the 1990's, Mr. Rollins has directed the well construction oversight, water quality sampling, and consumptive use permitting for the supply and return wells withdrawing water from the Floridan Aquifer.

Florida A&M University utilizes groundwater sources as a cooling exchange media in order to cool and dehumidify campus facilities. The most recent CUP application requested an average daily amount of 19.4 MGD, a maximum daily withdrawal amount of 27.MGD, and maximum monthly withdrawal amount of 725 million gallons per month. Water is supplied from the highly productive Floridan Aquifer located in Leon County Florida..

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William G. Rollins, P.G. (Cont.)

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Franklin County Floridan Aquifer Evaluation Study, Florida. For the Northwest Florida Water Management District, (NFWWMD), Mr. Rollins was the lead Hydrogeologist retained to provide professional oversight of all planned drilling activities as well as coordination with the Northwest Florida Water Management District (NFWWMD), Department of Agriculture (DACS - Division of Forestry), and the selected well drilling firm. Work was performed at four sites with work consisting of completing well specifications, assist in the bidding process, construction oversight of production and monitoring wells, oversight and water quality testing during construction of a saltwater interface well, and completion of 48 to 72-hour multi-well aquifer tests.

Remote Wellfield Development, City of Quincy, Florida. Mr. Rollins led Jim Stidham & Associates, Inc. (JSA) in cooperation with a was retained by William Bishop Engineering and the City of Quincy to oversee production and monitoring well construction and to perform testing on the Floridan Aquifer in the vicinity of Chattahoochee, Florida. The testing and data analysis was part of the initial stages of the development of a remote well field for the City of Quincy, Gadsden County, Florida. This work consisted of the installation of a Floridan Aquifer test and Floridan Aquifer observation wells, along with performance and analysis of a 72 hour aquifer pump test.

The goal of this phase of testing was to determine site specific hydrogeologic characteristics in the vicinity of the City of Quincy Remote Well Field. Ultimately, data derived from this testing was used to determine the potential impact a new well field may have on permitted and non-permitted users of groundwater within the Floridan Aquifer in the Chattahoochee area. The test well and pump test was completed and work resulted in successful completion and approval of a Consumptive Use Permit from the Northwest Florida Water Management District.

Construction and Demolition Landfill Permitting, Leon County, Florida. Mr. Rollins led the permitting program for two Construction and Demolition (C&D) facilities located in Leon County Florida. Work consisted of hydrogeological studies, well construction, water quality sampling and analysis, area studies, well searches, and successful completion of a State of Florida C&D Permit application for the two facilities. He oversaw the installation of over 25 wells and soil borings in order to provide a geological understanding of the sites upon which he developed groundwater monitoring plans which met the requirements of the Florida Department of Environmental Protection.

Citrus Grove BMP Confirmation Study Sebring/Avon Park Area, Florida. For this work, Mr. Rollins coordinated with the Florida Department of Environmental Protection, Department of Agriculture, and Citrus Farmers to view the project sites, identify well locations, install monitoring wells, and monitor these wells to confirm Best Management Practice (BMPs) in reduction of nitrates within the surficial aquifer. After receipt of Citrus Canker Hygiene training, Mr. Rollins directed the

03/16/11

William G. Rollins, P.G. (Cont.)

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installation of 5 - multilevel monitoring wells at nine different monitoring sites. The majority of sites utilized Continuous Multichannel Tubing (CMT) Wells, each with seven sampling ports. Upon completion of the wells, sites were interred into a quarterly sampling program in order measure the effectiveness of BMP compliance to bring nitrate values below State action levels.

Landfill Compliance, Board of County Commissioners, Gadsden County, Florida. For the past ten years, Mr. Rollins has worked with the Gadsden County Board of Commissioners through the County Road Department, to perform all compliance issues related to abandoned landfill sites in East Gadsden County and near Chattahoochee. This work consists of permit renewals, review of quarterly sampling reports, completion of biannual reports, groundwater flow analysis, well rehabilitation, new well construction, geo-hydrological analysis of proper well placement, and response to the Florida Department of Environmental Protection.



Anthony M. Holley, E.I.

CIVIL ENGINEER

Mr. Holley has over 5 years of experience in Civil Engineering providing support and design for stormwater and wastewater/water areas of study. He assists in the design of and upgrades to wastewater/water treatment plants. He is also responsible for obtaining permit renewals for both wastewater and water treatment plant operations. He is proficient in AutoCAD Civil 3D.

Spill Prevention, Control & Countermeasure (SPCC) Plan for Tallahassee Memorial HealthCare; Tallahassee, Florida

The SPCC Plan for Tallahassee Memorial HealthCare (TMH) was made to meet the condition set in place by EPA under 40 CFR Part 112. TMH has a total of six tanks ranging from 550 gallon to 15,000 gallons in four separate locations. One year after the initial Plan was implemented TMH added two more tanks to their facility. This required the SPCC Plan to be revised for additional tanks.

Aeon Church C&D Landfill Permit Renewal; Tallahassee, Florida

The Aeon Church Permit Renewal included designing a grading plan that would better suit stormwater runoff in the event of closure. Writing the permit and completing the packet supplied by Florida Department of Environmental Protection was also a major part of the project.

Mayo Correctional Facility Water System Upgrade; Lafayette, Florida

The Mayo Correctional Facility Water System Upgrade consisted of adding an air diffused blower system to replace the existing cascade aerator already in service. Mr. Holley provided engineering design and support through-out the design process of this project.

Lancaster Correctional Facility Water Treatment Plant; Trenton, Florida

The Lancaster Correctional Facility Water Treatment Plant was an upgrade from an existing system consisting of a hydropneumatic tank and chlorination system. The upgraded plant incorporated a new larger hydropneumatic tank, above ground storage tank, gas chlorination system, and high service booster pumps to provide both clean drinking water and fire flow protection to the correctional facility. Mr. Holley provided engineering design and support for the upgraded plant including initial design, submittals and RFIs. He also acted as CAD supervisor for the plans development.

Alachua County Wastewater Treatment Plant Upgrades; Alachua County, Florida

The Alachua County WWTP was an upgrade to mirror the existing equipment to increase the treatment capabilities of the plant. Mr. Holley provided engineering support for the construction and submittal process during all phases of construction. This support included CAD support and approval of submittals and RFIs as they came in from the construction management firm.

EDUCATION

B.S., Civil Engineering;
Florida State University

CERTIFICATIONS

Registered Engineer Intern;
Florida Board of
Professional Engineers

TRAINING/OTHER QUALIFICATIONS

40-Hour Hazardous Waste Site
Safety Training to meet the
requirements of 29 CFR
1910.120, Current 8-Hour
Refresher

Employment

Jim Stidham & Associates, Inc.
Staff Engineer,
2005 – Present

Anthony M. Holley (Cont.)

Live Oak Wastewater Treatment Plant Upgrades; Live Oak, Florida

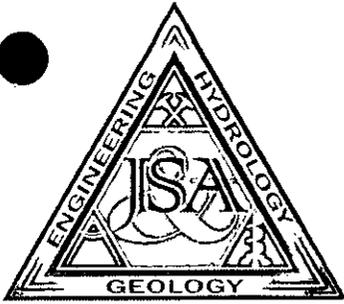
The Live Oak WWTP was an upgrade from 1.25 million gallons per day (MGD) treatment plant to a 3.0 MGD treatment plant. Mr. Holley provided engineering and CAD support for the design process of the upgrade along with support in approving submittals from the on-site contractors. The design included new components to mirror those already existing, along with additional ones to compensate for the increase in size.

Columbia County Wastewater Treatment Plant; Lake City, Florida

Mr. Holley provided engineering support for the design of a new WWTP to service a developing area in Columbia County, FL. The WWTP is a 0.160 MGD plant consisting of Sequencing Batch Reactors. The plant also included the design of a 22-acre spray field.

Golden Eagle Drainage Study; Tallahassee, Florida

Mr. Holley provided support for a drainage study for the Golden Eagle Homeowners Association. Designed a proposed stormwater solution that revolved around incorporating a 40.62-acre drainage basin into a golf course fairway, which was to be kept undisturbed.



DAN LITTERAL, P.G.

SENIOR GEOLOGIST

Mr. Litteral, with over 18 years experience, serves as a project manager responsible for supervising and coordinating contamination assessment activities including general field activities. These activities include: soil, water, and air sampling projects; supervising the installation of monitoring wells and soil borings; and report preparation, including test analysis, groundwater flow analysis, and figures. He performs groundwater modeling to help determine the most effective remediation system and prepares remedial action reports. Mr. Litteral also performs Phase I and Phase II Environmental Site Assessments and produces the corresponding reports.

EDUCATION

Masters Studies;
Florida State University

B.S., Geology & Archeology;
Wheaton College

CERTIFICATIONS

Licensed Professional Geologist;
State of Florida

TRAINING/OTHER QUALIFICATIONS

40- Hour Hazardous Waste Site
Safety Training to meet the
requirements of 29 CFR
1910.120, Current 8-Hour
Refresher

Lynn's Country Store; Havana, Florida

This project consisted of completing an extensive evaluation of a site where petroleum products had impacted soil and groundwater. Three separate hydrostratigraphic zones were impacted: Surficial, Intermediate and Floridan Aquifers, as well as potential surface water. All zones were fully characterized and assessed. A Remedial Action Plan (RAP) was prepared, in which the contaminated media was addressed. Soil was treated via Soil Vapor Extraction (SVE), while the surficial aquifer was treated through Air Sparge (AS). Due to high water table fluctuations, the Surficial had to be drawn down through a pumping system. Contamination in the Intermediate aquifer was also addressed through pumping from two recovery wells. An Air Stripper was utilized to treat groundwater pumped from the Surficial and Intermediate zone; treated water was then returned to the surficial aquifer through an injection well. A downgradient curtain of oxygen release compound, injected into the Surficial aquifer, was used to help prevent migration of the plume into a nearby surface water body.

Bay County Jail; Panama City, Florida

Mr. Litteral conducted an evaluation of the Bay County Jail facility, which had been impacted by a petroleum release from an AST and chlorinated solvents issuing from releases near the maintenance shop. Surficial and intermediate zone aquifers were impacted. Off site sources appeared to be contributing to the extensive petroleum plume below the site, and assessment included evaluation of potential off site sources. The site is located on an inlet from the Gulf of Mexico, requiring the use of stricter marine criteria for groundwater contaminant thresholds. Additional investigations in the stormwater system and the adjacent bayou were required. Due to logistical constraints, a mechanical remediation system could not be utilized. A bioremediation treatment was designed and implemented at the site. Petrophilic bacteria was injected in multiple injection wells across the site into the upper and lower surficial aquifer, and into the intermediate zone.

Rock Hill Aquifer Study; DeFuniak Springs, Florida

Mr. Litteral performed a study of the groundwater resources of the Rock Hill Water System in DeFuniak Springs, Florida. Work consisted of development of well construction specifications for a multi-well aquifer testing program, coordination with well drillers, oversight of well construction, chemical and physical data collection, short term pump testing, oversight of well development/geophysical

Dan Litteral, P.G. (Cont.)

logging/well completion, and performance of 8 to 72-hour pumping tests, including use of automatic data loggers. Tasks completed as a part of this project included specific capacity tests, groundwater sampling, and aquifer performance testing.

Whitaker Oil Facility; Panama City, Florida

Mr. Litteral conducted an assessment at the former Whitaker Oil facility in Panama City, Florida. The site is currently being utilized as a ship manufacturing facility, but historically the site was a petroleum bulk storage facility. As part of the assessment process, several contamination plumes were *identified and fully defined*. As the site had at one time maintained numerous large ASTs containing petroleum, acid and acetone products, there were several plumes with different chemicals of concern (COC) to evaluate. The plumes were defined to the greatest practical extent, including investigation of sediments in the adjacent bayou. Pilot testing was performed to evaluate the most effective treatment options for the site. A remedial action plan (RAP) is being prepared in which a system of air sparge wells is being proposed for treatment of groundwater contamination, with an associated vapor extraction system to collect volatiles associated with groundwater treatment and to remove petroleum vapors from the vadose zone.

3. RESUMES OF OUTSIDE CONSULTANTS

JSA will use the following outside consultant for projects that may be acquired from this contract.

Chen H. Lin, P.E. Ph. D.

JSA has attached on the following pages the resume of this consultant.

CHEN H. LIN, P.E., Ph.D. Civil/ Environmental Engineer

EDUCATION

Ph.D., Environmental
Engineering Sciences,
University of Florida
M.S., Civil Engineering,
Auburn University
B.S., Civil Engineering, Cheng-
Kung University, Taiwan

CERTIFICATIONS

Licensed Professional Engineer,
States of Alabama,
Florida, Michigan, and
South Carolina
Registered Professional
Engineer, Taiwan

OTHER LANGUAGES

Chinese (Mandarin): fluent in
speaking, reading, and
writing
Taiwanese: fluent in speaking,
reading, and writing
Japanese: basic speaking and
reading

EMPLOYMENT

Self Employed
2011 – Present

Jim Stidham & Associates, Inc.
Professional Engineer
2005 - 2011

Ecology & Environmental, Inc.
S.E. Regional Engineering
Manger
1988 - 2005

With 33 years' experience, Dr. Lin has completed projects throughout the United States, Asia, and South America encompassing industrial and domestic water and wastewater treatment system design, bench- and pilot-scale treatability studies, Title V air permitting, water resource conservation, reclaimed water reuse, soil and groundwater remediation, solid and hazardous waste management, and environmental impact assessment. For international clients, he has managed large-scale, water and wastewater treatment systems and solid waste management infrastructure development projects funded by World Bank or Asian Development Bank (ADB). He is also a consultant to ADB and Florida Board of Professional Engineers.

Project Highlights:

Compliance and Permitting:

Confidential Client, Perry, Florida. Dr. Lin has been the consultant to this defense contractor for over 15 years. He provides technical supports in engineering as well as environmental compliance. He serves as the liaison in dealing with FDEP in securing all of the client's environmental permits related to its various explosives manufacturing and waste treatment operations, including the RCRA hazardous waste treatment facility operation permit; facility-wide Title V air permit; electroplating industrial wastewater treatment plant operation permit; and the water supply system compliance. He has successfully reduced the amount of the RCRA permit financial assurance by over 50% and recently secured the USEPA approval for an alternative mercury monitoring plan (a variance to 40CFR, Part 61, Subpart E) for the client's sludge dryer operations. He also generates annual reports for the Title V air permits; supported the client's RCRA permit modification efforts to add new products; directed the assessments, corrective measure implementation, and closure of over 15 solid waste management units; reviews the results of routine soil and groundwater monitoring; and serves as the client's liaison with regulatory agencies.

Groundwater Remediation Design and Title V Air Permit Maintenance, Quincy, IL. For Harris Corporation Dr. Lin designed and managed the annual inspection of a groundwater treatment system at its Quincy, IL telecommunication equipment manufacturing facility. He also assisted in the application, renewal and annual reporting for the client's Title V Air operating permit. At Harris' overseas manufacturing facilities in Shenzhen and Guangzhon, China, He supported the environmental programs manager during the client's on-site corporate health and safety surveys. He used his understanding of Chinese regulations and extensive experience in both China and the United States to help ensure that the client's survey was both comprehensive and complete. Most importantly, Dr. Lin helped identify several potential engineering design problems concerning the facility waste management and treatment systems.

Chen H. Lin, P.E., Ph.D. (Cont.)

Wastewater Treatment:

Talquin Electric Killearn Lakes WWTP, Tallahassee, Florida. For TEC Dr. Lin evaluated the treatment processes, operation practices, and maintenance schedule of this activated sludge plant. As the engineer-of-record he prepared, and successfully secured the current FDEP permit. He identified sources of the influent strength fluctuation and the high sludge yield problems as well as other deficiencies and recommended corrective measures. He prepared bid packages and assisted TEC in contractor procurement for the recommended corrective measures. He also assisted TEC in proofing its sprayfield operations unrelated to the observed groundwater quality.

Talquin Electric Sandstone Ranch WWTP, Tallahassee, Florida. Dr. Lin evaluated the feasibility of upgrading the existing extended aeration activated sludge treatment plant at its current location and completed the preliminary design of a new Sequential Batch Reactor (SBR) process. As the engineer-of-record, he prepared the permit application and has successfully negotiated with FDEP for a set of reasonable effluent standards for the new plant. The FDEP has issued "intent to issue permit" and currently this permit is under public comment period. He is also assisting TEC in solving oil-and-grease problems in the lift station. Detail design of the new plant is ongoing.

Cape Canaveral and Patrick Air Force Bases, Cape Canaveral, Florida. Dr. Lin evaluated impacts of deluge water generated during rocket launches to Cape Canaveral station's wastewater treatment plant and recommended a series of corrective measures. At this air force station and at Patrick Air Force Base, Dr. Lin was the engineer-in-charge for the stormwater management design and SPCC plans development related to the Clean Water Act compliance.

City of Live Oak WWTP, Live Oak, Florida. Dr. Lin is assisting the City of Live Oak in a complex permitting process similar to the City of Panama City. Under an FDEP consent order Live Oak's existing trickling filter plant was being upgraded to a Modified Ludzack-Ettinger (MLE) process with an upgraded capacity as well as higher effluent quality standards for public access reuse. As the engineer-of-record of the complex FDEP permit application combining renewal, capacity expansion, treatment process overhaul, and multiple effluent reuse mechanisms, he is the liaison for the City in working with FDEP on developing the new permit conditions. The FDEP has issued "intent to issue permit" and currently this permit is under public comment period. Dr. Lin also completed the NPDES permitting process for the WWTP and is assisting in the development of plans to replace the current sprayfield with public access reuse for the effluent disposal. He also evaluated the sludge digester and drying bed capacities and developed plans to integrate them into the new treatment process.

Columbia County WWTP, Ellisville, Florida. Dr. Lin is assisting Columbia County in the planning, design and permitting of its new WWTP at the intersection of I-75 and Highway 441. The impacts of a landfill leachate and the pretreatment standards, if needed, are being evaluated.

Chen H. Lin, P.E., Ph.D. (Cont.)

Talquin Electric Lake Jackson WWTP, Tallahassee, Florida. Dr. Lin assisted TEC in isolating causes of occasional unstable nitrate levels in this SBR plant effluent. He developed plans for investigating nitrate presence in the groundwater and is overseeing the implementation and progresses of the plans. He prepared an Agricultural Use Plan for this WWTP and secured the associated FDEP permit modification for the sludge management practice. He is preparing the construction plans and bid documents for a new sludge digester and a Rapid infiltration basin at this WWTF.

Talquin Electric Meadows WWTP, Tallahassee, Florida. For this advanced treatment SBR plant Dr. Lin developed the Capacity Analysis and the O&M Performance Reports in support of the FDEP permit renewal. The renewed operation permit for this WWTF has been issued without comments or Request for Additional Information (RAI).

Talquin Electric Oyster Bay WWTP, Shell Point, Florida. For this plant which is experiencing rapid growths in its service areas Dr. Lin developed the capacity expansion and treatment upgrade plans. He identified effluent disposal being the critical issue for this area and has evaluated options including public accessed reuse, additional infiltration basins, wetland disposal, and deep well injection. He also evaluated alternatives for TEC to integrate this plant into Wakulla County's new Otter Creek WWTP.

Industrial Wastewater Treatment Plant Evaluation and Water Reuse, Thorofare, NJ. For this commercial bearing manufacturing facility Dr. Lin evaluated causes of non-compliance for its industrial wastewater treatment effluent. He developed a wastewater minimization plan which included wastewater reuse as a key part for bringing the effluent quality to be in compliance of the permit criteria.

Industrial Wastewater Treatment Plant Evaluation and Permit Appeal, Henry, IL. For this Fortune 500 special chemical manufacturing facility Dr. Lin evaluated opportunities and options for wastewater effluent reuse at its combined domestic and industrial wastewater treatment plant. He also supported the client's endeavors in appealing to Illinois Pollution Control Board for the plant's ammonia effluent standard adjustments.

Precision Machine & Supply, Odessa, Texas. Dr. Lin completed an innovative groundwater reclamation project for the Texas Natural Resource Conservation Commission (now Texas Commission on Environmental Quality [TCEQ]). It involved a groundwater treatment system design using electrochemical precipitation technologies for chromium contamination at this former chrome plating facility. The system was successfully constructed and later operated by a third party.

Military Facilities. For the United States Air Force, he helped design and develop bid documents for groundwater extraction systems at Niagara Falls International Airport-Air Reserve Station. For the Southern Division of the Naval Facilities Engineering Command, he provided civil engineering support for contamination assessments and remedial activities at multiple hazardous waste sites at the Naval Air Station Pensacola. For the Jacksonville District of the United States Army Corps of

Chen H. Lin, P.E., Ph.D. (Cont.)

Engineers, he completed two design projects at Ramey Air Force Base, Puerto Rico. For Cape Canaveral Air Force Station Dr. Lin assisted in the management and treatment of the deluge water generated during rocket launches. Impacts of the deluge water to the station's wastewater treatment plant operations were evaluated and a series of responding measures were recommended. Impacts to the regional groundwater quality from the previous discharges of untreated deluge water were also evaluated. At this air force station and at Patrick Air Force Base, Dr. Lin was the engineer-in-charge for the storm water management design and SPCC plans development related to the Clean Water Act compliance.

Remediation:

Statewide Hazardous Waste Site/Dry-Cleaning Solvent Cleanup Program, Florida. For the Florida Department of Environmental Protection (FDEP), Dr. Lin was the lead program engineer for the remediation of denser-than-water nonaqueous phase liquid (DNAPL) contamination at sites throughout Florida. He works closely with FDEP project managers to manage engineering tasks using a steady, progressive approach to achieve State goals of expedited site cleanup and eventual closure. He managed the design, construction, and O&M of groundwater remediation systems at the Dryclean USA #11401 site in Boca Raton, One Hour Cleaners in Coral Springs, City Chemical site in Sanford, and over 10 other DNAPL-contaminated dry-cleaning sites in Palm Beach, Duval, and Broward counties. He also managed natural attenuation monitoring for 15 other sites contaminated with dry-cleaning solvents. Under Dr. Lin's management, five sites successfully met their cleanup goals within three years.

Statewide Assessment/Remediation Programs, South Carolina. For the South Carolina Department of Health and Environmental Control, he completed FSs and designed remedial systems for dry-cleaning sites including One Hour Martinizing in Darlington, Joye Dry Cleaning in Marion, and Colonial Cleaners in Denmark. The majority of One Hour Martinizing site has been remediated after the successful implementation of an in-situ oxidation injection as designed. He also managed FS for the Columbia Organic Chemical site, an industrial site in Cassatt where contaminants include heavy metals, volatile and semivolatile organics, PCBs, and dioxin.

Statewide Assessment/Cleanup of UST and Petroleum Sites, Florida. For FDEP, Dr. Lin developed remedial designs for soil and groundwater treatment at sites contaminated by gasoline UST leakage in Sparr, Ocala, New Hope, Sneads, Wacissa, and over 40 other locations. The remedial systems for over 30 sites were successfully constructed, commissioned, and operated under Dr. Lin's management.

Additional UST Sites, Texas, Alabama, Mississippi, and Florida. Dr. Lin developed remedial designs and oversaw remedial system construction and O&M for the Lakeport Kerr McGee site on behalf of the Texas Water Commission (now TCEQ); the Flomaton and Hamilton's Texaco sites for the Alabama Department of

Chen H. Lin, P.E., Ph.D. (Cont.)

Environmental Management; the Natchez site for the Mississippi Department of Environmental Quality; and sites in Miami, Dallas, and Houston for Ryder Truck Rental, Inc.

Water Supply:

Talquin Electric Cooperative, Inc. (TEC) Wakulla Public Water Supply System, Wakulla, Florida. TEC is a non-profit utility provider which owns and operates 18 public water supply systems in Wakulla, Leon, and Gadsden Counties. Wakulla Water System consists of three supply wells and serves coastal communities with a combined capacity of 2.4 MGD. As TEC's consultant, Dr. Lin has been assisting TEC in water quality evaluation, treatment feasibility study, design, permitting, and construction management services. In September 2007, in response to a sudden increase of iron and manganese concentrations in all three supply wells, he conducted a fast-track pilot study and the design of the treatment system, developed the preliminary engineering report (PER), and obtained FDEP construction permit. These actions successfully addressed FDEP's concerns. Concurrently Dr. Lin arranged a hydrogeological investigation which revealed that the iron and manganese concentrations were receding and that the plume was likely an isolated incident. Based on this information, Dr. Lin worked with FDEP NW District and revised the treatment design to a low-cost sequestering system. FDEP issued a general construction permit for the sequestering system. This system has been installed and placed in operation on an as-needed basis. As the engineer of record, he certified the as-built drawings and submitted the completion certification to FDEP.

In 2008 Wakulla Water System encountered elevated disinfection by-products (DBP) for which FDEP issued a consent order. Dr. Lin performed water quality evaluation and found discrepancies from the monitoring results reported to FDEP by the laboratory. He reviewed the laboratory protocols and proved that the high DBP levels were partially caused by improper lab practices. FDEP initiated its own investigation and confirmed this finding and consequently rescinded the consent order. In a rare occurrence, FDEP issued a letter complimenting this effort. Dr. Lin is also working with TEC operator on best management practices for chlorination dosage and residence time management by which DBPs have been kept in acceptable levels. However, in anticipation of the future Stage II DBP regulations, Dr. Lin has recently completed a treatability study using activated carbon adsorption and will be using the results in the design of a full-scale treatment system.

In September 2008 Wakulla Water System exceeded 75% of the permitted capacity. In response to FDEP request, Dr. Lin developed a Capacity Analysis Report (CAR) in which population growth projection and supply-demand analysis was conducted. The CAR concluded that by October 2012 a new water source will be necessary. Dr. Lin, joined by project geologists, is currently working with TEC in acquiring new well sites, exploring water quality and quantity, obtaining Water Management District consumptive and FDEP construction permits, and the engineering design. The new supply well is anticipated to be placed into service by October 2012.

Chen H. Lin, P.E., Ph.D. (Cont.)

Florida Department of Corrections (FDOC) Lancaster Correctional Institution Water Supply System Expansion, Trenton, Florida. In association with the prison expansion, Lancaster Correctional Institution needed to expand its water supply system. Dr. Lin is the engineer of record for the design and construction of this project. The design included a 10,000-gallon hydropneumatic tank, a 200,000-gallon glass-infused ground storage tank, high service and fire protection pump station, and chlorination system. He developed the PER, obtained the FDEP construction permit, completed the design plans and specifications, and assisted bidding of the project and procurement of the construction contractor. This project is currently in the beginning stage of submittal review and the construction is scheduled to begin in mid February 2010.

FDOC Martin Correctional Institution Water Supply System Upgrade, Indiantown, Florida. Martin Correctional Institution's water supply system was under the FDEP consent order for elevated DBP levels and lead and copper concentrations in the finished water. Dr. Lin was tasked by FDOC to complete a fast-track evaluation and design of the water treatment system upgrade in compliance with the conditions and schedule specified in the consent order. As the engineer of record he completed a bench-scale treatability study, developed the PER, obtained the FDEP construction permit, completed the design plans and specifications, conducted the bidding of the construction, oversaw the construction, managed the start-up and disinfection, provided completion certification to FDEP, and obtained the FDEP clearance for placing the system into service. This project has been successfully completed and, more importantly, it fulfilled the requirements specified in the consent order.

FDOC Mayo Correctional Institution Water Supply System Modification, Mayo, Florida. Mayo Correctional Institution's water supply system was under an FDEP consent order and a USEPA administrative order for elevated DBP levels in the finished water. Dr. Lin was tasked by FDOC to complete design of the water treatment system modification in compliance with the conditions and schedule specified in the consent/administrative orders. As the engineer of record, he developed the PER, obtained the FDEP construction permit, completed the design plans and specifications, conducted the bidding of the construction, oversaw the construction, arranged the disinfection, managed the start-up, provided completion certification to FDEP, and obtained the FDEP clearance for placing the system into service.

City of Live Oak Water Supply System, Live Oak, Florida. City of Live Oak's water supply system has been designated by FDEP as under the direct influence of surface water (UDI) and is required to treat the raw water through lime coagulation, precipitation, and filtration processes. Dr. Lin compared other feasible treatment alternatives and performed a cost-benefit analysis for the City of Live Oak and concluded that securing new water sources/ supply wells will be a more cost effective long-term solution. Based on this assessment, City of Live Oak is currently installing a new production well. Dr. Lin and other JSA geologists are assisting the

Chen H. Lin, P.E., Ph.D. (Cont.)

City of Live Oak in the well pumping tests, water quality assessment, and potential treatment evaluation. This project is still ongoing as of January 2010.

Martin Electronics Ordnance Facility, Perry, Florida. For Martin Electronics, Inc., (MEI), an explosives manufacturer, Dr. Lin completed the design plans and specifications for its water supply system, procured the construction contractor, managed the construction and disinfection, conducted the system start-up, and provided completion certification to FDEP. This project has been successfully completed and the new water system has been in operation since July 2009.

Landfill:

Aeon Church C&D Landfill, Tallahassee, Florida. For this privately owned C&D landfill, Dr. Lin successfully secured the FDEP operating permit renewal in 2009-2010 during which time the Florida Solid Waste Rules were being amended and FDEP substantially changed its permitting review policies so this renewal was processed by FDEP essentially through the same scrutiny as a new application. As the engineer of record, Dr. Lin redesigned the landfill cells, stormwater management facility, and the final cover. He also developed the closure and long-term care plans, groundwater monitoring plans, operation plans, and the financial assurance cost estimate.

Tram Road C&D Landfill, Tallahassee, Florida. For this new privately owned C&D landfill, Dr. Lin oversaw the construction of the first cell, developed and submitted to FDEP the completion certification, and obtained the FDEP approval for operations in 2008. In the 2009 FDEP operating permit renewal he worked closely with the client and the FDEP in integrating the new Florida Solid Waste Rules into the new permit and assisted in reaching solutions to FDEP's policies reversal regarding certain critical conditions, including the liner and leachate collection/treatment requirements, cell bottom elevation, and operational protocols. Dr. Lin redesigned the landfill cells, designated resource recovery area, and stormwater management facility. He also developed the closure and long-term care plans, groundwater monitoring plans, operation plans, and the financial assurance cost estimate.

International:

Municipal Wastewater Treatment and Solid Waste Disposal Infrastructure Development, Shandong Province, China. As a consultant to Asian Development Bank, Dr. Lin evaluated feasibilities of secondary and tertiary wastewater treatment and reclaimed water reuse alternatives for four cities and in this province. He also reviewed the industrial wastewater treatment FS for two paper pulp mills and siting and preliminary design of solid waste landfills for three other cities. From this evaluation Asian Development Bank made a determination to finance \$80 million loan toward this \$180 million investments.

US TIES Program, China. Under the US State Department's TIES Program, Dr. Lin was a member of a team that joined representatives of China's State

Chen H. Lin, P.E., Ph.D. (Cont.)

Environmental Protection Administration, the World Bank, Asian Development Bank, and several provincial and municipal environmental protection bureaus in their efforts to strengthen China's hazardous and toxic waste regulations. He helped formulate technical and performance specifications for waste treatment and disposal and participated in the identification and evaluation of US-China hazardous and toxic material treatment/disposal technologies.

Qujing Water and Sewage System, Yunnan Province, China. For this World Bank-financed, \$400-million project, Dr. Lin conducted water supply and wastewater treatment system evaluations for the City of Qujing. He evaluated water resources quality and quantity, reservoir protection, distribution network analysis, and water purification technology selection; inspected the municipal utility systems; developed protocol for computer-aided design mapping of the piping systems; and developed O&M manuals for the sewer collection, sewage treatment, water distribution, and water purification systems. In an effort to conserve water resource and resolve the city's water shortage problems, he also organized a citywide water main pressure survey and used the results to develop a citywide water main leakage detection and prevention implementation plan.

Landfill Design Review, Shenyang, China. Dr. Lin reviewed the design for an industrial hazardous waste landfill and its associated chemical/physical wastewater treatment plant, which receives liquid industrial waste and landfill leachate. The project was part of a World Bank-funded industrial waste treatment and disposal project for the City of Shenyang.

Industrial Hazardous Waste Management, Beijing, China. Dr. Lin managed a two-year, World Bank-funded program to assist the Beijing Industrial Hazardous Waste Management Center and Beijing Environmental Protection Bureau in the development of programs to control hazardous waste generation, transport, treatment, storage, and disposal. He evaluated existing environmental laws and regulations in the PRC and Beijing and made recommendations to address identified deficiencies. He organized and performed hazardous waste inspections for 20 of the city's largest hazardous waste generating and treatment, storage, and disposal (TSD) facilities. These included three petrochemical plants, six chemical manufacturers, two pharmaceutical plants, three machinery factories, two electronic factories, two automobile manufacturers, a leather tanning plant, and a waste management facility. He identified potential environmental problems and recommended solutions including front-end waste minimization, proper handling, end-of-pipe treatment.

As part of the Beijing program, he also developed training programs for regulators and for industrial environmental personnel and conducted "hands-on" training during the in-plant inspections. In addition, Dr. Lin developed a waste management information system; completed the preliminary design for Beijing's centralized hazardous waste TSD facilities; and helped develop financial strategies for the city's hazardous waste management center.

Hubei Urban Environmental Project Package B, Hubei Province, China. Dr. Lin was the training task manager for a four-year, \$400-million (US), World

Chen H. Lin, P.E., Ph.D. (Cont.)

Bank-funded program to assist institutional development in wastewater collection/treatment, municipal solid waste management, air pollution control, and process improvements. He evaluated the engineering design for the Yichang Landfill and recommended modifications that were subsequently approved by World Bank and resulted in substantial cost savings for the Hubei Urban Environmental Project Office. In addition, he developed a training manual for municipal solid waste landfill operators in the City of Yichang. The manual was later adapted as training material for the City of Dalian under the Liaoning Urban Construction and Renewal Project Office, funded by the International Bank for Reconstruction and Development and the International Development Association.

Panda Detergent Manufacturing Plant, Beijing, China. In support of a joint venture by the Beijing Second Daily Chemical Plant and Procter and Gamble, he participated in an operational audit. He evaluated pollution prevention concerns and contributed to the final report, which was one of several documents supporting the plant's application for an operating permit.

Industrial Waste Management Program, Taiwan. For Taiwan Environmental Protection Administration (EPA), Dr. Lin developed an industrial waste management program for Taiwan. He reviewed hazardous waste cleanup proposals submitted by industries in Taiwan; conducted over 1,000 in-plant, multimedia inspections for stationary pollution discharge; provided recommendations to the Taiwan EPA. In addition, Dr. Lin contributed to the drafting of Taiwan's hazardous waste management regulations and technical standards.

Water Conservation and Distribution System evaluation, Taipei, Taiwan. During six years with Taipei Water Department in Taiwan, Dr. Lin participated in a water budget balancing program which included raw water source development, surplus water storage, in-plant process wastewater reuse, and distribution system leak reduction. He was later in charge of water distribution system maintenance, improvement, and leakage prevention for the entire Municipality of Taipei (population three million).

Water/Wastewater Treatment Engineer, Taipei, Taiwan. He worked for one year as a civil engineer with Ta-Shun Engineering, Inc., responsible for the turnkey design and construction of industrial water and wastewater treatment facilities. The projects included two electroplating wastewater treatment facilities: one for the Taipei Locomotive Maintenance Plant that involved use of ion exchange technologies, and the other for a military armory in Taipei that involved use of chemical and physical coagulation and precipitation. Dr. Lin also was responsible for the construction management, start-up, and commissioning of a water purification facility at the Second Nuclear Power Plant in Taiwan.

Environmental Damage Claims, Saudi Arabia. For the Saudi Arabian Presidency of Meteorology and Environment, Dr. Lin oversaw development of the preliminary remedial design and prepared the engineering cost estimate for the remedial alternatives proposed to mitigate contamination along the Saudi Arabian coastline resulting from the 1991 Gulf War oil spill. The remedial design called for

Chen H. Lin, P.E., Ph.D. (Cont.)

the removal of millions of cubic yards of oil-contaminated sediment and restoration of the affected environment. The design involved material handling, off-site thermal treatment of the contaminated sediment, and reestablishment of biodiversity.

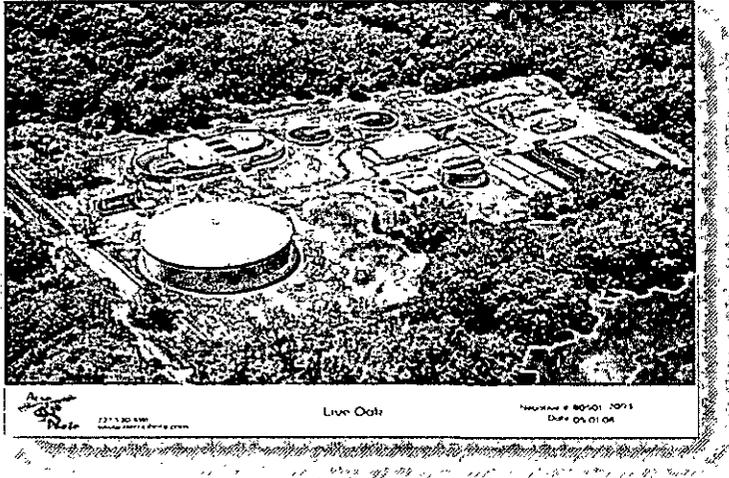
El Tablazo Petrochemical Complex, Maracaibo, Venezuela. For Petroquímica de Venezuela, S.A., Dr. Lin reviewed and recommended modifications to the engineering design of pollution prevention systems for the 1,200-metric-ton-per-day urea/fertilizer plant. His recommendations greatly improved the cost-effectiveness of the pollution prevention measures and significantly reduced both the capital construction and O&M costs for the client.

Automotive Parts Manufacturing Plant, Matamoros, Mexico. He led a group of engineers in the design of a biological treatment facility for the plant's industrial and domestic wastewater.

**B. EXPERIENCE WITH PROJECTS OF A SIMILAR TYPE AND
SIZE**

1. PROJECTS WHICH BEST ILLUSTRATE THE EXPERIENCE OF JSA

The following is a list of projects JSA has performed. The following projects were selected to provide general overview of the abilities of JSA in several areas of work.



Live Oak WWTP

701 Lime Avenue
Live Oak, Florida 32060

Project Type(s): Process Design
Permitting
Specifications

Owner: City of Live Oak

Contact: Mr. Robert Farley (386) 362-2276

Date of Completion: Ongoing

Project Manager(s): Chen Lin P.E., Anthony Holley E.I.

Project Description:

The City of Live Oak's current wastewater treatment plant (WWTP) is a biological secondary treatment facility using a Modified Ludzack-Ettinger (MLE) process with 1.5 million gallons per day (MGD) capacity and high-level disinfection. The City has entered an agreement with the Department of Corrections to receive the wastewater generated from, and provide reclaimed water with a quality suitable for public access reuse to, the new Suwannee River Correctional Institution (SRCI). To fulfill this need, the City plans to expand its WWTP capacity to 3.0 MGD.

In 2007, JSA partnered with Eutaw Utilities was selected by the City to complete the WWTP expansion process design and application for the FDEP construction permit. JSA's design approach was to match the existing equipment as much as possible for the ease of future operation and maintenance (O&M). JSA also evaluated all existing process equipment and identified those components that can be upgraded or retrofitted at substantially lower costs and used the results of this evaluation as the basis of our design. JSA then developed the preliminary design and successfully secured the FDEP construction and stormwater permits. During the design, JSA engineers solicited input from, and incorporated the improvements suggested by, the City's operators. The final design included a grit separator, an MLE bioreactor, two screw press type mechanical dewatering devices, an aerobic digester, one new and two retrofitted self-cleaning filters, sludge and effluent pumping stations, 11 miles of reuse water line, and the associated yard piping, wiring, and control instrumentation. JSA worked closely with the city engineer, Eutaw Utilities, and completed the detail design plans and specifications in October 2008. JSA assisted in the construction contractor bidding and selection process. The construction of this project is expected to begin in February 2009.

JSA also successfully completed a complex permitting process for the City of Live Oak in 2006. This permit combined permit renewal, capacity expansion, FDEP consent order compliance, and major process overhaul (which changed the outdated trickling filter to the MLE process). Additionally, JSA assisted the City in developing a public access reuse plan for the effluent disposal.



Talquin Electric Coop – Discharge Monitoring Reports

921 Thomasville Road
Tallahassee, FL 32303
(850) 224-2466

Project Responsibilities:
Surface and Groundwater
Monitoring

Owner: Talquin Electric Cooperative Utilities (TEC)

Contact: Mr. Tim Waddle (850) 627-7651

Date of Completion: Ongoing

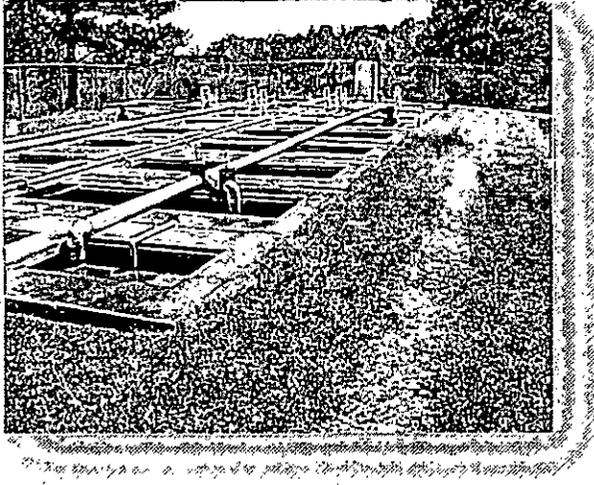
Project Manager(s): Scott Sigler P.G., Chen Lin P.E.

Project Description:

Jim Stidham & Associates provides quarterly groundwater and surface water sampling for Discharge Monitoring Reports for the Kilearn, Meadows, Gadsden East and Lake Jackson Waste Water Treatment Plants (WWTP) in the TEC Utility region of northwest Florida. In compliance with the permits, issued under Chapter 403, F.S., and Chapters 62-4, 62-600, 62-610, 62-320 and 62-640, F.A.C., JSA provides geological support through design, installation and sampling of the groundwater monitoring systems within their Zone of Discharge.

The varying facilities have surface water bodies associated with monitoring as well as subsurface investigations of the water table and/or intermediate saturated strata. Sampling is conducted quarterly with spring, summer, fall and winter events. All field activities are conducted in accordance with Florida Department of Environmental Protection's Groundwater Sampling Standard Operating Procedures (DEP-SOP-001/01, FS 2100, 2200 Surface Water and Groundwater Sampling). Sample results are compared to regulatory limits found in Chapters 62-777, 62-550, and 62-302 F.A.C. as well as site specific conditions. JSA performs internal Quality Assurance and Quality Control review and Professional Geological oversight.

Additionally, JSA provides assistance with discharge and loading compliance studies, background characteristics, mounding analysis for percolation ponds, and water table surface mapping for groundwater flow analysis and gradient determination.



Sandstone Ranch WWTP

242 Meige Road
Tallahassee, Florida 32310

Project Responsibilities:
Construction Permitting
Operating Permit Renewal
Wastewater Treatment Plant Design
Construction Management

Owner: Talquin Electric Cooperative, Inc.

Contact: Timothy Waddle (850) 627-7651

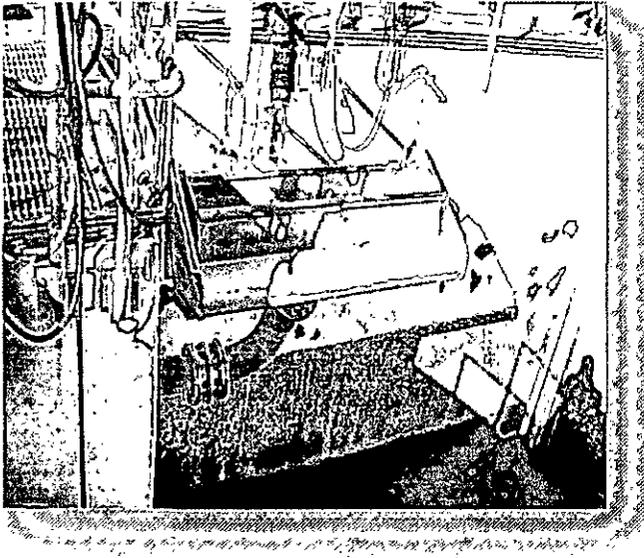
Date of Completion: June 2007

Project Manager(s): Chen Lin P.E.

Project Description:

This project is for the expansion and permit renewal/ application for TEC's Sandstone Ranch WWTP located in west side of Tallahassee. JSA evaluated the demand projection and expansion potential of the existing 70,700 GPD extended aeration activated sludge treatment plant and determined that a new plant will be more cost effective than expansion. JSA then completed the preliminary design of a new 250,000 GPD Sequential Batch Reactor (SBR) plant at the current location.

For the expanded effluent disposal, JSA and Environmental Geotechnical Specialties, Inc. (EGS) completed the geotechnical and hydrogeological investigation and performed groundwater mounding modeling, then designed new expanded rapid filtration basins on site. JSA conducted the natural inventory survey and environmental impact assessment at the proposed new percolation site, and then prepared the permit application. JSA successfully negotiated with FDEP for a set of reasonable effluent standards for the new plant. For the sludge disposal, JSA completed an Agricultural Use Plan and submitted it to the FDEP for approval. The FDEP issued the construction permit in June 2007.



Lake Jackson Wastewater Treatment Plant

5999 Tower Road
Tallahassee, Florida 32303
Office: (850) 562-2115

Project Responsibilities:

Design
Construction Management
Permitting
Troubleshooting
Sampling

Owner: Talquin Electric Cooperative, Inc.

Contact: Mr. Timothy Waddle (850) 627-7651

Date of Completion: Ongoing

Project Manager(s): Chen Lin P.E.

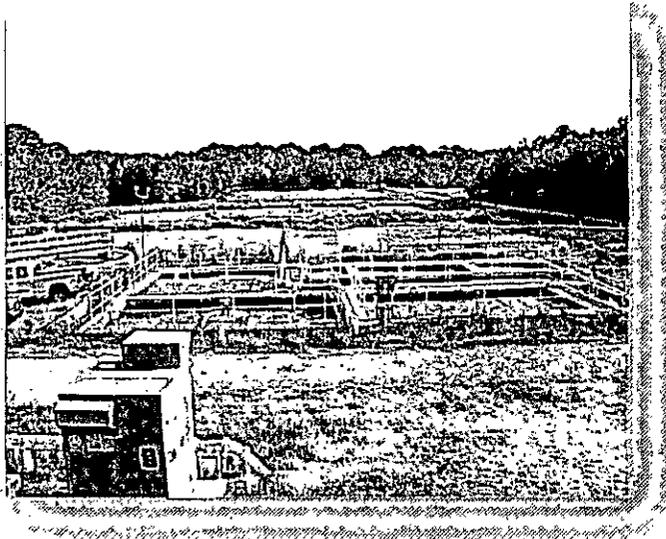
Project Description:

Talquin Electric Cooperative, Inc.'s (TEC's) Lake Jackson WWTP is a sequential batch reactor (SBR) secondary treatment plant in Leon County, northwest of Tallahassee, Florida. This plant was designed by JSA prior to 2002. The construction was completed and commissioned for operation in 2003. Due to the growing demands, in 2004, JSA was again tasked to expand this plant from 500,000 to 750,000 gallons per day (GPD). One of the challenges encountered during the design of the system expansion was the disposal of the expanded treatment effluent. JSA completed the hydrogeological investigation of the site and selected the option of an on-site rapid rate infiltration basin. JSA performed groundwater modeling to ensure that excessive groundwater mounding would not be encountered on site and then completed the design. The expansion also included additional aerobic digester and on-site sludge drying beds. The dried sludge is disposed of at a permitted land application site.

Upon completion of the expansion design, JSA applied and secured the FDEP construction and operation permit in August 2005. For this FDEP-approved expansion, JSA prepared the construction plans and specifications and the bid documents for the new sludge digester and the infiltration basin. For the sludge disposal, JSA completed an Agricultural Use Plan which was later approved by FDEP.

JSA is also assisting TEC in the quarterly groundwater monitoring associated with the Lake Jackson WWTP operations. In 2007, nitrate was detected in some of the on-site groundwater

monitoring wells. JSA identified all potential nitrate sources and pathways and eliminated all that could be associated with the plant operations. Based on the findings, JSA successfully assisted TEC in defusing a potential regulatory enforcement action.



Killearn Lakes Waste water Treatment Plant

Deer Lake East – Killearn Lakes
Subdivision
Tallahassee, FL
(850) 562-2115

Project Responsibilities:
System Troubleshooting
Permitting

Owner: Talquin Electric Cooperative, Inc.

Contact: Mr. Timothy Waddle (850) 627-7651

Date of Completion: February 2007

Project Manager(s): Chen Lin P.E.

Project Description:

This project is for the troubleshooting and permit renewal for TEC's Killearn Lakes Wastewater Treatment Plant (WWTP), an activated sludge treatment plant with a 700,000 GPD capacity. The treatment effluent is disposed of through percolation ponds and spray fields. Sludge is aerobically digested and dried on site before transported to an off-site land application facility for disposal.

Unstable nitrate levels in the effluent and insufficient sludge digestion and drying had been problematic at this plant. JSA conducted evaluation and identified causes of the nitrification and sludge dewatering problems. JSA also identified the high sludge yield problems as well as other deficiencies and recommended corrective measures. In August 2006 JSA prepared the permit renewal package and submitted to FDEP. The new permit was granted in February 2007.

JSA has been assisting TEC in the permit compliance, including groundwater monitoring, effluent quality evaluation, and periodical treatment efficiency review. JSA is also assisting TEC in resolving water quality issues related to the nearby homeowner association's stormwater ponds.



**Jefferson Community
Water System**

1512 Wekewa NE
Lloyd, Florida 32337

- Project Responsibilities:**
 Design
 Modeling
 Construction Management
 Permitting

Owner: Jefferson County

Contact: Mr. Bobby D. Cooper (850) 510-7233

Date of Completion: Ongoing

Project Manager(s): Bert Conoly P.E., Bill Rollins P.G.

Project Description:

Beginning in 2007, JSA provided comprehensive engineering services to JCWS to provide safe potable water to a projected rural population of approximately 800 new customers (400 meter points). JSA initially assisted the JCWS with applications for and securing of funding through the USDA Rural Development Services program. This was a successful effort that resulted in complete funding of the project. Additionally, JSA prepared all necessary permit applications and secured permits from a variety of permitting agencies including FDEP, FDOT, CSX Railroad, Jefferson County, and others.

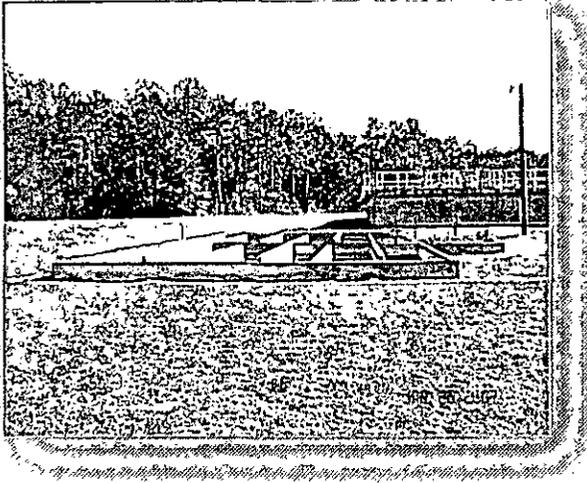
Cost estimates, planning documents, and proposed construction schedules were prepared and evaluated, bid packages were prepared, and the bids were collected and reviewed. JSA prepared all contract documents for subcontractors and contracts were let. The total cost of this project was approximately \$3.7 million.

Comprehensive engineering design was performed and construction documents/drawings prepared for the various project sections. The system is composed of 2-inch, 4-inch, 6-inch, and 8-inch DIP and PVC sections and appurtenances (generators, pressure relief valves/station, etc.) with all water lines installed sub grade. Several road, driveway, stream, and railroad crossings required jack and bore or directional drilling to cross. Approximately 35+ miles of water line were designed as part of this project.

Additionally, JSA is provided construction oversight and inspection services, as well as preparation of engineering designs and documents necessary for change orders and occasional

design changes as needed. This project was completed in February 2010. JSA is currently assisting JCWS in additional system design and permitting to add additional lines under a new contract.

As part of additional JCWS contracted services, JSA provides oversight, engineering, and coordination for emergency repairs for the system including permitting, funding acquisition, and construction oversight of lines or system components as needed. One example of JSA's assistance to JCWS was the repair of a vandalized elevated water storage tank. Vandals' bullets punctured the tank walls and bottom just before the 2009 New Year. JSA assisted JCWS with the emergency repairs and coordination with contractors to minimize interruption to the service. JSA developed the tank repair specifications, provided oversight and inspection services of the repair work done by a tank contractor. Another similar example was the emergency repairs to a 6-inch main at a stream crossing during Hurricane Fay in August 2008.



Gadsden East Wastewater Treatment Plant

South of US Highway 90
Midway, Florida 32343
Office: (850) 562-2115

Project Responsibilities:

Design
Construction Management
Permitting
Troubleshooting
Sampling

Owner: Talquin Electric Cooperative, Inc.

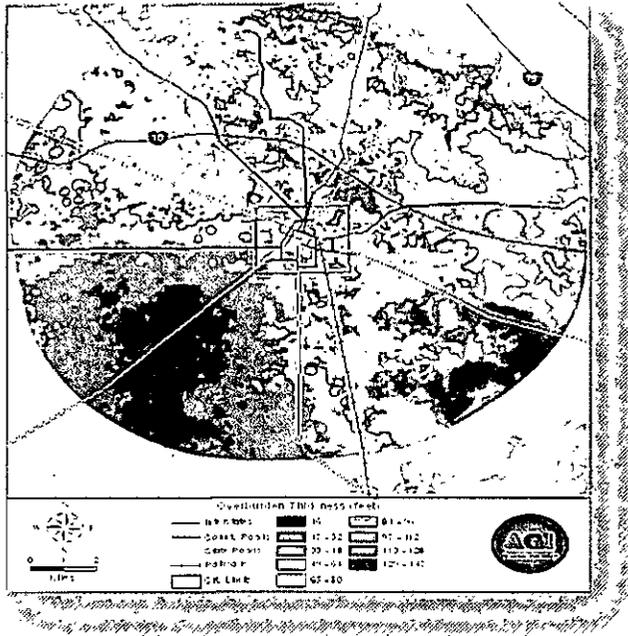
Contact: Mr. Timothy Waddle (850) 627-7651

Date of Completion: Preliminary Permit Issued March 2011

Project Manager(s): Chen Lin P.E.

Project Description:

This project was for the construction of TEC's new 0.25 MGD Gadsden East WWTP outside of Tallahassee in Gadsden County, Florida. JSA completed the design, permit applications, and construction administration for this new automated batch reactor (SBR) plant. Sludge management includes aerobic digester, drying beds, and wet weather storage facility. This new plant has been successfully completed and is currently operated by TEC personnel. So far there have been no operation problems. In 2009, FDEP requested that Gadsden east stop sending residuals to Wettappo Farms. A minor permit modification was submitted and approved. In 2010, JSA completed the 2010 permit renewal for Gadsden East WWTP.



City of Live Oak

Live Oak - Florida

Project Responsibilities:
Consumptive Use Permitting

Owner: City of Live Oak

Contact: Suwannee River Water Management District (386) 362-1001

Date of Completion: Ongoing

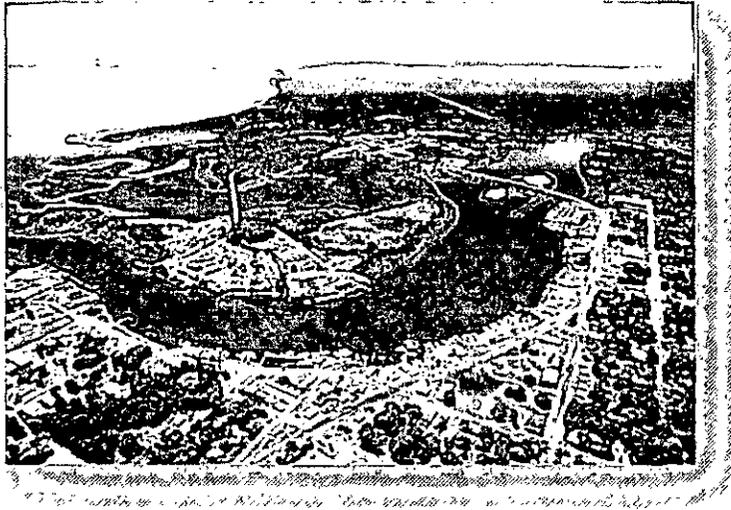
Project Manager(s): Bill Rollins P.G.

Project Description:

The City of Live Oak, Florida, was in need of securing land for a proposed well field tapping the Floridan Aquifer System to meet future public water supply needs.

Acquiring and developing new land for well-field installation was increasingly more difficult due to growth of the City and surrounding areas and increased environmental standards and regulations. A well field suitability analysis was to identify land areas that were best suited to meet the City's future water use needs. A study area was delineated using a seven-mile buffer around the City of Live Oak water line distribution system. A ranking and weighting system for specific factors was performed to assist the City in determining the most appropriate locations for well-field development.

Digital GIS grids were obtained or created representing each of the data utilized. The grids were broken into categories, or classes, which were selected based on statistical frequency of the grid-cell distance values. Each grid cell was then ranked using a scale of one to nine – one representing the least suitable areas and nine representing the most suitable areas. The ranks were assigned based on proximity to the features of the data layers except in the case of the Floridan Aquifer System overburden thickness, the ranks of which was based on overburden thickness. A weight was assigned to each data layer based on its level of importance in location of a possible well field location.



City of Carrabelle

Franklin County, Florida

Project Responsibilities:
Consumptive Use Permit

Owner: City of Carrabelle

Contact: Courtney Dempsey (850) 697-2727

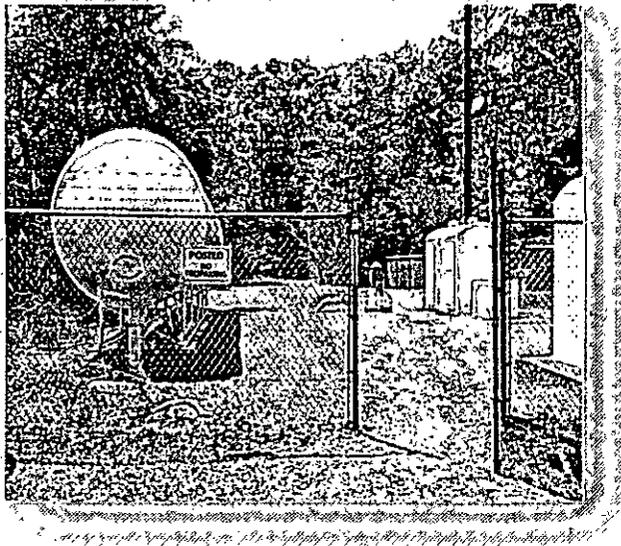
Date of Completion: Fourth Quarter of 2008

Project Manager(s): Bill Rollins

Project Description:

The City of Carrabelle consolidated its Consumptive Use Permit with the City of Lanark Village and the St. James Bay Golf Course. Groundwater modeling of the Floridan Aquifer was required to perform impact analysis for saltwater intrusion, chloride transport, and well pumping impacts to the Surficial and Floridan Aquifers in support of the Consumptive Use Permit. Jim Stidham & Associates, Inc., was retained by the City of Carrabelle, to evaluate these impacts to the Upper Floridan Aquifer. The primary purpose of the ground water modeling effort was to gain insight into the ground water hydrogeology and hydraulics of the upper Floridan aquifer in the vicinity of southern Franklin County, located in northwest Florida. This includes the assessment of the current state of ground water conditions in the aquifer as well as the prediction of the most likely future conditions resulting from additional ground water development. Model development and resource analysis were focused towards satisfying the requirements for the consumptive use permit application (CUPA) process as specified by the Northwest Florida Water Management District (District).

The primary objective of this study was to develop and calibrate a numerical model of the upper Floridan aquifer. In addition, the intent of this study was to perform scenario modeling to determine and document, within the limits of the calibrated model, the potential ground water responses for up-coning of mineralized water.



Wakulla Public Water Supply System

Wakulla County - Florida

Project Responsibilities:

Design
Construction Management
Sampling

Owner: Talquin Electric Cooperative, Inc.

Contact: Mr. Timothy Waddle (850) 627-7651

Date of Completion: Ongoing

Project Manager(s): Chen Lin P.E., Anthony Holley E.I.

Project Description:

Talquin Electric Cooperative, Inc.'s (TEC's) Wakulla Public Water Supply System is currently serving a population of approximately 5,100 in Wakulla County, Florida. It consists of three supply wells with a combined capacity of 2.4 million gallons per day (MGD). In early September 2007, elevated iron and manganese were detected in the groundwater and quickly migrated to all three supply wells. JSA conducted a fast-track pilot study while assisting TEC staff in maintaining uninterrupted water supply to the customers. The pilot study was conducted simultaneously with a hydrogeological investigation and groundwater monitoring. The pilot study confirmed the feasibility of a fixed-bed oxidation and filtration system using proprietary manganese dioxide-impregnated silica. JSA obtained the FDEP permit for the construction, but then JSA's hydrogeological investigation indicated that the iron and manganese concentrations were receding and the plume was likely an isolated incident. Based on this finding, JSA revisited the treatment options and selected the sequestering approach using AquaMag[®] injection. The injection system has been installed at all three well locations and in operation since installation. JSA also assisted TEC in meeting all regulatory requirements.

The Wakulla Water System also encountered disinfection by-product (DBP) issues and the situations worsened in 2008. Based on the results of the hydrogeological investigation, JSA again conducted groundwater monitoring for source water characterization and reviewed the sampling and laboratory analytical protocols. The findings suggested low DBP precursors in the source waters; however, the long retention time of water at the southern tip of the distribution system is the main factor for the elevated DBPs. JSA engineer also discovered questionable laboratory protocols that could lead to artificially high DBP detections. JSA confirmed this

potential by sending duplicate samples to two independent labs. By correcting the sampling/analysis protocols, the DBP levels became more representative of the actual conditions. JSA also worked closely with TEC engineers and operators in managing the chlorine dosage levels and the balance between pumping rate and water demand. With the proper protocols and temporary measures (chlorination management and flushing), the DBP levels have been below the criteria since the 3rd quarter of 2008. JSA is currently assisting TEC in obtaining FDEP clearance to suspend the DBP-associated enforcement stipulations.

2. CURRENT PROJECTS

A few of the current sites that are under contract with JSA that were not listed in previous project summaries are:

Lake Jackson Wastewater Treatment Plant

Talquin Electric Cooperative, Inc.'s (TEC's) Lake Jackson WWTP is a sequential batch reactor (SBR) secondary treatment plant in Leon County, northwest of Tallahassee, Florida. This plant was designed by JSA prior to 2002. The construction was completed and commissioned for operation in 2003. Due to the growing demands, in 2004, JSA was again tasked to expand this plant from 500,000 to 750,000 gallons per day (GPD). One of the challenges encountered during the design of the system expansion was the disposal of the expanded treatment effluent. JSA completed the hydrogeological investigation of the site and selected the option of an on-site rapid rate infiltration basin. JSA performed groundwater modeling to ensure that excessive groundwater mounding would not be encountered on site and then completed the design. The expansion also included additional aerobic digester and on-site sludge drying beds. The dried sludge is disposed of at a permitted land application site.

Upon completion of the expansion design, JSA applied and secured the FDEP construction and operation permit in August 2005. For this FDEP-approved expansion, JSA prepared the construction plans and specifications and the bid documents for the new sludge digester and the infiltration basin. For the sludge disposal, JSA completed an Agricultural Use Plan which was later approved by FDEP.

JSA is also assisting TEC in the quarterly groundwater monitoring associated with the Lake Jackson WWTP operations. In 2007, nitrate was detected in some of the on-site groundwater monitoring wells. JSA identified all potential nitrate sources and pathways and eliminated all that could be associated with the plant operations. Based on the findings, JSA successfully assisted TEC in defusing a potential regulatory enforcement action.

Talquin Electric Cooperative Discharge Monitoring Reports

Jim Stidham & Associates provides quarterly groundwater and surface water sampling for Discharge Monitoring Reports for the Kilearn, Meadows, Gadsden East and Lake Jackson Waste Water Treatment Plants (WWTP) in the TEC Utility region of northwest Florida. In compliance with the permits, issued under Chapter 403, F.S., and Chapters 62-4, 62-600, 62-610, 62-320 and 62-640, F.A.C., JSA provides geological support through design, installation and sampling of the groundwater monitoring systems within their Zone of Discharge.

The varying facilities have surface water bodies associated with monitoring as well as subsurface investigations of the water table and/or intermediate saturated strata.

Sampling is conducted quarterly with spring, summer, fall and winter events. All field activities are conducted in accordance with Florida Department of Environmental Protection's Groundwater Sampling Standard Operating Procedures (DEP-SOP-001/01, FS 2100, 2200 Surface Water and Groundwater Sampling). Sample results are compared to regulatory limits found in Chapters 62-777, 62-550, and 62-302 F.A.C. as well as site specific conditions. JSA performs internal Quality Assurance and Quality Control review and Professional Geological oversight.

Additionally, JSA provides assistance with discharge and loading compliance studies, background characteristics, mounding analysis for percolation ponds, and water table surface mapping for groundwater flow analysis and gradient determination.

Wakulla Regional Public Water Supply

Talquin Electric Cooperative, Inc.'s (TEC's) Wakulla Regional Public Water Supply System is currently serving a population of approximately 5,100 in Wakulla County, Florida. It consists of three supply wells with a combined capacity of 2.4 million gallons per day (MGD). In early September 2007, elevated iron and manganese were detected in the groundwater and quickly migrated to all three supply wells. JSA conducted a fast-track pilot study while assisting TEC staff in maintaining uninterrupted water supply to the customers. The pilot study was conducted simultaneously with a hydrogeological investigation and groundwater monitoring. The pilot study confirmed the feasibility of a fixed-bed oxidation and filtration system using proprietary manganese dioxide-impregnated silica. JSA obtained the FDEP permit for the construction, but then JSA's hydrogeological investigation indicated that the iron and manganese concentrations were receding and the plume was likely an isolated incident. Based on this finding, JSA revisited the treatment options and selected the sequestering approach using AquaMag[®] injection. The injection system has been installed at all three well locations and in operation since 2009. JSA also assisted TEC in meeting all regulatory requirements.

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been below the criteria since the 3rd quarter of 2008. JSA is currently assisting TEC in obtaining FDEP clearance to suspend the DBP-associated enforcement stipulations.

Jefferson Community Water System

Beginning in 2007, JSA provided comprehensive engineering services to JCWS to provide safe potable water to a projected rural population of approximately 800 new customers (400 meter points). JSA initially assisted the JCWS with applications for and securing of funding through the USDA Rural Development Services program. This was a successful effort that resulted in complete funding of the project. Additionally, JSA prepared all necessary permit applications and secured permits from a variety of permitting agencies including FDEP, FDOT, CSX Railroad, Jefferson County, and others.

Cost estimates, planning documents, and proposed construction schedules were prepared and evaluated, bid packages were prepared, and the bids were collected and reviewed. JSA prepared all contract documents for subcontractors and contracts were let. The total cost of this project was approximately \$3.7 million.

Comprehensive engineering design was performed and construction documents/drawings prepared for the various project sections. The system is composed of 2-inch, 4-inch, 6-inch, and 8-inch DIP and PVC sections and appurtenances (generators, pressure relief valves/station, etc.) with all water lines installed sub grade. Several road, driveway, stream, and railroad crossings required jack and bore or directional drilling to cross. Approximately 35+ miles of water line were designed as part of this project.

Additionally, JSA is provided construction oversight and inspection services, as well as preparation of engineering designs and documents necessary for change orders and occasional design changes as needed. This project was completed in February 2010. JSA is currently assisting JCWS in additional system design and permitting to add additional lines under a new contract.

As part of additional JCWS contracted services, JSA provides oversight, engineering, and coordination for emergency repairs for the system including permitting, funding acquisition, and construction oversight of lines or system components as needed. One example of JSA's assistance to JCWS was the repair of a vandalized elevated water storage tank. Vandals' bullets punctured the tank walls and bottom just before the 2009 New Year. JSA assisted JCWS with the emergency repairs and coordination with contractors to minimize interruption to the service. JSA developed the tank repair specifications, provided oversight and inspection services of the repair work done by a tank contractor. Another similar example was the emergency repairs to a 6-inch main at a stream crossing during Hurricane Fay in August 2008.

3. PROJECT REGULATORY PROCEDURES

JSA understands how the constantly changing design standards, codes and other regulatory directions can affect the outcome of a project even before it begins. So before any design is started on new projects, JSA reviews all current design standards, codes and other regulatory directions that pertain to each new project accepted by the firm. For new projects, it is also our custom to request a pre-project meeting with the regulatory group in order to be sure that there are no misunderstandings prior to project initiation.

4. SPECIAL AND BASIC RESOURCES

JSA uses the following resources to provide a level and efficiency that others find it hard to match:

JSA has its own drilling division that provides close support to our Engineering and Geological services. JSA uses the following resources to provide a level of readiness and project efficiency that others find it hard to match:

- ✓ Software (AutoCAD Civil 3D, ArcGIS, Visual Modflow Groundwater Modeling, K Y Pipes Water System Modeling and Surfer Surface Modeling)
- ✓ Failing F-7 Drilling Rig (Capable of both mud rotary and hollow stem auger)
- ✓ Mobil B61 HD Drilling Rig (Capable of both mud rotary and hollow stem auger)
- ✓ AMS 9600 Pro Power Probe (Capable of split-spoon sampling and hollow stem auger)
- ✓ AMS 9100 VTR D Power Probe (Capable of split-spoon sampling and fitting through existing doorways)
- ✓ Grunfos 2" and 4" Submersible Pumps and Controllers
- ✓ Geotech Peristaltic Pumps
- ✓ Geotech Bladder Pumps and Controllers
- ✓ In-suti Level Troll Model 700 Transducers
- ✓ In-suti Troll 9500 Multi-parameter Water Quality Meter
- ✓ Marsh-McBirney Flow Mate 2000 Sonic Flow Meter
- ✓ Solinst and Heron Electronic Water Depth Tapes
- ✓ Pakton pH, Conductivity, ORP and Oxygen Probes/Meters
- ✓ LaMotte 20/20e Turbidometers
- ✓ TDS Ranger Surveying Data Logger

- ✓ Sokkisha Set 3 Total Station

C. WILLINGNESS TO MEET SCHEDULE AND BUDGET REQUIREMENTS

JSA recognizes the importance of schedule and budgets in any project. We, as a general routine, hold project scheduling meetings weekly with our project managers. A project timetable is generated to assure timely field and activities, based on the clients scheduling needs, and the regulatory requirements. As a general rule, Gantt Charts, scheduling software, and other tools are utilized to establish critical paths for project implementation. Additionally, budgetary monitoring of our projects is performed in an on-going manner by utilization of internal JSA budget tracking measures, staff meetings, and accounting reports generated internally.

D. EFFECT OF FIRM'S RECENT, CURRENT AND PROJECTED WORKLOAD

1. CURRENT PROJECTS

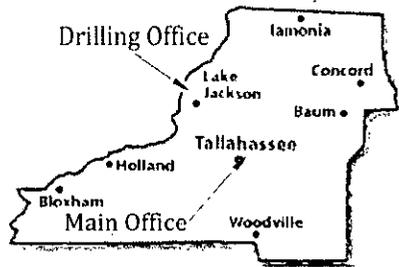
On the following page is a list of projects JSA currently is under contract with. All Florida Department of Environmental Protection (FDEP) sites project completion date are to be considered ongoing due to the nature of the petroleum clean-up program.

Project Name	Project Completion Date	Description
FDEP - Pug's Beer & Wine	Ongoing	Ongoing Remediation
FDEP - Day by Day, Inc	Ongoing	Monitoring
FDEP - Palmour Property	Ongoing	Operation & Maintenance
Forsythe Property	Ongoing	Environmental Site Assessment
Gadsden County - Bus Barn	Second Quarter 2011	Waiting for Restrictive Covenant
FDEP - Havana Car Wash	Ongoing	Remedial Action Plan Design
FDEP - Cliff Berry	Ongoing	Site Assessment
FDMS - Monroe County WWTP Demolition	First Quarter 2012	Design
TEC - Wetumpka	Third Quarter 2011	Design
TEC - Songbird	Ongoing	Monitoring & Reporting
Gadsden East Landfill	Ongoing	Monitoring & Reporting
Chattahoochee Landfill	Ongoing	Monitoring & Reporting
FDEP - C&T Variety	Ongoing	Post Remedial Monitoring
FDEP - Woodland	Ongoing	Remedial Design/Monitoring
FDEP - Whitaker Oil	Ongoing	Remedial Action Plan Design
FDEP - Furniture Warehouse	Ongoing	Pilot Test/Design
FDEP - King's Station	Ongoing	Remedial Action Plan Design
FDEP - Raceway	Ongoing	Site Assessment
FDEP - Kool Beanz	Ongoing	Post Remedial Monitoring
FDEP - The Bookshelf	Ongoing	Remedial Action Construction
FDEP - Jet Fuel, Inc.	Ongoing	Remedial Action Construction
Aenon Church C&D Landfill	Ongoing	Monitoring & Reporting
FDEP - Wakulla Old Sheriff's Office	Ongoing	Site Assessment
TEC - Killlearn WWTP	Ongoing	Monitoring & Reporting
TEC - Meadows WWTP	Ongoing	Monitoring & Reporting
TEC - Gadsden East WWTP	Ongoing	Monitoring & Reporting
TEC - Lake Jackson WWTP	Ongoing	Monitoring & Reporting

2. JSA ABILITY TO ABSORB NEW PROJECTS

We at JSA pride ourselves in our diverse capabilities. Our professionals are highly experienced in all areas of our operation, regardless of the project. Our staff cross train within JSA to become familiar with the wide variety of projects we handle. This allows JSA to have flexibility in allocating staff to various projects. Additionally, we have multiple professionals in the industry that we can bring in as a sub-consultant if additional expertise is required. Therefore, JSA is immensely willing and able to utilize inside as well as outside sources to absorb new projects when necessary.

E. EFFECT OF PROJECT TEAM LOCATION



JSA is located at 547 North Monroe Street, Suite 201 in Tallahassee, Florida, in the middle of Leon County. This location will be the central office for any project acquired from this contract. This convenient proximity to Leon County offices as well as most likely project locations provides the ability to meet with Leon County staff easily and quickly as necessary as well as visit sites or projects without minimal mobilization costs. We feel as though our location will be a great asset in keeping projects cost effective.

Additionally, JSA maintains a satellite office and equipment warehouse approximately six (6) miles north of I-10 on Hwy 27 in northern Leon County. At this location, we are able to keep our fleet of drilling vehicles, material, supplies, and shop equipment necessary to operate and environmental operation. It also provides convenient access to I-10 and Monroe Street thereby providing efficient access to project locations throughout the county

F. APPROACH TO THE PROJECT

PROJECT MANAGEMENT PLAN

JSA is committed to completing our assignments to meet and exceed our client's expectations and requirements, within budget, and on time. Our goal is to work in close partnership with the County, involve its staff in project development and alternative decisions, and produce an operator friendly, low maintenance, cost effective project. To this end, quality assurance programs on our projects include quality assurance and control, as well as project scheduling, management, and budgetary control measures as part of our integrated quality management program.

Three basic keys for a successful project are communications, monitoring, and adjusting. Communication among the team members, County staff, and JSA staff is the key element to effective management under this contract. This begins with a well-defined

scope of work prepared by JSA and the County. The communication must continue throughout the project as the requirements are disseminated to the individual team members and as coordination of the various work activities proceed.

The major elements of JSA management approach include our Project Execution Plan, well established Lines of Communication, Quality Assurance/Quality Control, Cost Control, and Timeliness.

PROJECT EXECUTION PLAN

Our Project Management Guidelines requires the preparation and adherence to a Project Execution Plan (PEP) for each project. The project specific PEP is an easy reference to the critical project requirements for all involved staff and provides the details of the scope of work, project requirements, organization of project staff, schedules, budgets, and quality control and quality assurance procedures to be implemented.

The following is a PEP Outline:

Project Objectives, Approach, And Scope of Services

- Briefly describes the project objectives and approach to meet those objectives.
- Describes the scope of services and the deliverables in detail.

Schedule

- The project schedule identifies the relationship of individual and related tasks on the project time line.
- The schedule identifies milestone dates, deliverables, review and permitting
- The project schedule provides for a method of tracking project progress and is updated to reflect that progress.

Responsibilities of Key Personnel

- The responsibilities of all discipline managers, key personnel, and subconsultants are clearly defined.
- Each shall be responsible for the scope compliance, the content, the correctness, and the timely completion of his or her portion of the work.

Quality Assurance and Quality Control Procedures

- The General Quality Control Guidelines are reviewed and modified to correspond with any unique requirement of the project.
- Studies, design, budget, scheduling, submittals, permitting constraints, etc., which are crucial to the project execution are described in detail.
- The review processes are defined in detail, including staff member who will conduct the review, what project elements will be reviewed, at what level of project completion each review will be conducted, and how will the reviews be documented.

- A schedule and a typical agenda will be prepared for regularly scheduled review meetings.
- A progress reporting system for the projects will be developed and outlined and the frequency of progress reports established.
- Explicit procedures for estimating actual completion of the work will be identified.
- The corporate and divisional reports will be used to monitor job costs will be selected and identified.

ESTABLISH LINES OF COMMUNICATION

To maintain the project schedules, it is important to maintain timely, internal communications and communication between the consultant, subconsultants, the County and permitting agencies. These communications must be clear, concise and precise. Proven in-place vertical lines of communication and data transfer procedures from our Project Director/Manager, Mr. Bert Conoly, P.E. proceeding down to the task managers and on to the design engineers, technicians and secretaries will be utilized.

Lines of communications with the County will be through Mr. Bert Conoly, P.E. and the County Project Manager. Communications to permitting and other agencies will be through our Project Manager and the engineer or architect responsible for preparing the application or performing the required design.

We will provide the City with monthly reports to provide current project status information. These reports, which will cover activities, problems, and recommendations, will facilitate our goal of maintaining the City involvement throughout the project. The activities section of the monthly reports will also include: task items percent complete and budget status, percent and graphic plot of total work complete and total budget status of projected work for the next monthly period, and percent of total projected time expended.

QUALITY CONTROL/QUALITY ASSURANCE

JSA designs are innovative, complete, and developed with care to provide bid documents that are clear to contractors and to protect the interests of our clients. The best measures of quality are low change orders and repeat business. We enjoy a 90% repeat business with our existing clients, many of which we have served for over 20 years.

Quality control on the County's assignment is just as important to JSA as it is to the County. Quality control is only effective if it is conducted throughout the assignment. It begins at the initiation of a project by receiving the input from the most experienced staff and continues with peer reviews throughout the project. It is not incorporated into our projects as a separate effort, as a distinct task, or as a specific duty. Quality is an attitude within each of our staff about how and what we do to provide quality work to our clients while remaining within our budgetary constraints.

All project deliverables undergo a formal review process prior to submittal to the client. QA/QC reviewers are a part of the Project Team, having experience in terms of design, construction, and QA reviews. They are senior staff personnel selected at the start of a project who are involved in and informed about the project from conception through completion, particularly regarding project objectives, approach to completion of the scope of work, and client expectations.

JSA is committed to providing high quality engineering service to its customers through its continuous quality improvement program that involves all personnel in a systematic, logical process to continually improve the firm's work practices and procedures. Achieving this goal requires a certain amount of regimen to coordinate our effort toward producing a quality product, to provide clear procedures to be followed, and to monitor the results of our efforts. The JSA team will utilize the following approach to quality involving: procedures for project execution, QA/QC procedures, the continuous quality improvement process, technical review committee, value engineering and constructibility reviews, and review meetings. These areas are detailed below.

- **Procedures for Project Execution:** Standard procedures for project execution are documented in Project Management Quality Guidelines (PMQG), adopted by the firm's Board of Director. The PMQG provides project managers with current guidelines and procedures for managing projects and assuring quality in our technical performance for the proposal stage through the closeout stage.
- **QA/QC Procedures:** As our projects grew even more complex, our clients communicated to us that technical quality alone was not addressing their needs. We therefore developed procedures to assure the quality of the services we were delivering to our clients. Our Quality Manual establishes the general quality control guidelines for technical quality control of the services we provide: planning reports and studies, design services, construction phase services, and facility inspection services. The Quality Manual is used in conjunction with the Project Management Manual to integrate the technical and management practices necessary to complete assignments successfully. The success of a completed project is judged against the following criteria: Client Satisfaction, Project Objectives, Scope Requirements, Project Budget, and Project Schedule.
- **Review Meetings:** In addition to technical in-house workshop sessions, the Project Manager, together with key members of the Project Team, will meet with County staff on a monthly basis, and more often when appropriate, to discuss overall project progress, design requirements, permitting, and related management issues. In addition to the review of monthly progress reports, additional meetings will be established to include formal review for the work product at key completion milestones for monitoring of both quantitative and qualitative progress.

COST CONTROL

Our team members have managed assignments for governmental and private clients throughout southeastern United States and abroad, and we do so on a regular, ongoing basis. Cost containment on these design and construction projects is a basic criteria. It is critical to our own future that we maintain a competitive position in the marketplace. That means a constant, careful management of our costs. It is critical that our clients receive projects, which are not only technically sound, but that those projects are performed within strict cost-control objectives for design and construction.

Cost monitoring and control are critical components of the management plan. Standard cost accounting procedures provide our Project Managers with real time data to monitor project costs and keep the work within budget. Deficiencies are noted in a timely manner to allow corrective action.

Discipline leaders will break down work tasks into 80 hours or less elements and have engineering, technicians, and CAD personnel track their hours. This gives the discipline manager quick data on project progress and if adjustments must be made.

Project budgets are distributed to key personnel at the initial meeting and a tracking subnumber established. Budgets are prepared to reflect both labor and expenses. Each project manager is responsible to maintain accurate accounting of time expended with respect to time budgeted. Costs are reviewed at each meeting and corrections made to reestablish budgets as required. Invoicing is reviewed by the project manager and submitted in a timely manner to provide accurate and current billings to the client.

If changes in scope arise, they are identified in a manner that is consistent with the terms of the Contract. The client is immediately notified of any change in scope verbally, and subsequently in writing. A description, cost estimate, and schedule are prepared for review by the client. Formal documentation is prepared and submitted to the client, and impact on the schedule is reviewed. New tracking numbers are established for monitoring change in scope items. No work started on out of the scope of work without written approval of client.

To enable our project managers to implement in cost control, we have developed an effective management information system (MIS) for controlling cost. This system consists of four basic elements, which include:

- Timesheet information for team employees is assembled bi-weekly and indicates the work assignment as well as the task on which time was spent.
- Subcontractors are required to submit similar information on a bi-weekly basis, either by computer transfer or by FAX.
- Level of Effort (LOE) and approximate payroll charges to task are compiled bi-weekly.
- Task Managers and subcontractors on a weekly basis provide travel and ODC charges.

TIMELINESS

JSA currently has personnel immediately available to begin work on the County's projects. Our outside consultants have indicated that their workload is also such that they can respond immediately.

JSA and the County will establish a detailed schedule for each project. Each team member will be made aware of milestone dates and discipline interdependency, and the importance of being timely.

The project schedule will detail the steps required and time allotted to each step to complete the project. Depending on the complexity and interdependence of the task items, Critical Path Method (CPM) schedule or simpler bar chart schedule will be developed to establish the sequence and duration of the task items. Whichever scheduling system is chosen, it will be utilized as part of the project management information system for managing all phases of the project.

The schedule will be reviewed at each progress meeting. If any slippage of the schedule is identified, measure will be implemented to reestablish schedule. Available measures include additional labor or extended hours. JSA is dedicated to the County's anticipated schedules.

TYPICAL PROJECT APPROACH

JSA has previously outlined some of the possible project assignments and provided an overview of our Management Control Plan. The actual execution of the typical project provided will generally follow the following approach.

- **Project Initiation:** Upon notice of the task assignment JSA will meet with the County's Project Manager to establish a scope of work and services. JSA will then select the project team members and develop a fee schedule to negotiate with the County. Upon final authorization, JSA will prepare the Project Execution Plan, Communication Plan, QA/QC Program, Cost Control Plan, and finalize the project schedule.
- **Data Acquisition Phase:** During the acquisition phase of the project, JSA/EGS will initiate topographic survey, geotechnical services, and utility locates; gather existing plans and other existing design documentation; and gather other information pertinent to the design project including service area, existing and future population projections, flows, peak factors, etc. The findings of the data acquisition will be submitted to the County for review and comment.
- **Preliminary Design Phase (30% Design):** During the preliminary design phase, JSA will initiate dialogue with regulatory and permitting agencies having jurisdiction and/or permitting empowerment over the project and/or project area. During this phase, hydraulic modeling will be performed, conceptual designs prepared (30% design drawings); preliminary cost estimates prepared; and the plans and associated documentation submitted to the County for review, comment, and concurrence.

- **60% Design Phase:** Upon receipt of comments or concurrence from the Preliminary Design Review, JSA will make any noted corrections and proceed with design documents to a level of 60% completion including a draft of the project specification and a revised opinion of probable cost.
- **Final Design:** Upon receipt of 60% Design Review comments, JSA will proceed to final design documents including drawings, general and technical specifications, and final opinion of probable cost.

Permitting: Generally, permitting will be performed with 60% or Final Design documents. Certain project elements may be permitted at earlier project stages dependent upon the extent of agency involvement and the time frame to receive permits. JSA will prepare permit applications and supplemental documentation for execution and submittal by the County and will respond to any questions or requests for additional information.