

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

PROPOSAL RESPONSE COVER SHEET

THIS PAGE IS TO BE COMPLETED AND INCLUDED AS THE COVER SHEET FOR YOUR RESPONSE TO THE REQUEST FOR PROPOSALS.

The Board of County Commissioners, Leon County, reserves the right to accept or reject any and/or all bids in the best interest of Leon County.

Keith M. Roberts, Purchasing Director

John Dailey, Chairman
Leon County Board of County Commissioners

This bid response is submitted by the below named firm/individual by the undersigned authorized representative.

BY Environmental Consulting & Technology, Inc.
(Firm Name)
Larry J. Danek
(Authorized Representative)
Larry J. Danek, Ph.D., President
(Printed or Typed Name)
ADDRESS 3701 Northwest 98th Street
CITY, STATE, ZIP Gainesville, FL 32606
TELEPHONE 352/332-0444
FAX 352/332-6722

ADDENDA ACKNOWLEDGMENTS: (IF APPLICABLE)

Addendum #1 dated 3/4/11 Initials _____ Addendum #3 dated _____ Initials _____
Addendum #2 dated 3/8/11 Initials _____ Addendum #4 dated _____ Initials _____

PLEASE MARK WHICH CATEGORIES FOR WHICH YOU WISH TO BE CONSIDERED:

- | | |
|--|--|
| <input checked="" type="checkbox"/> a. Stormwater Engineering | <input type="checkbox"/> h. Surveying |
| <input type="checkbox"/> b. Roadway Design | <input type="checkbox"/> i. Subdivision and Site Development Engineering |
| <input type="checkbox"/> c. Traffic and Intersection Engineering | <input checked="" type="checkbox"/> j. Parks and Recreational Facility Engineering |
| <input type="checkbox"/> d. Structural Engineering | <input type="checkbox"/> k. Utility Engineering |
| <input type="checkbox"/> e. Geotechnical Services | |
| <input checked="" type="checkbox"/> f. Environmental Support Services | |
| <input type="checkbox"/> g. Construction Engineering and Inspection Services | |



Environmental Consulting & Technology, Inc.

March 15, 2011
ECT No. P1711-0001

Mr. Keith Roberts
Leon County Purchasing Division
1800-3 Blair Stone Road
Tallahassee, Florida 32308

Re: Request for Proposals (RFPs) for Civil Engineering Services, Continuing Supply
Proposal No. BC-03-17-11-25

Dear Mr. Roberts:

Environmental Consulting & Technology, Inc. (ECT), is pleased to submit our proposal to provide the referenced services to Leon County. This submittal includes one "Original" that contains the general section and a section of the specific information for each of the work categories (stormwater engineering, environmental support services, and parks and recreational facility engineering) we are submitting, as an all inclusive "book." Additionally, for each of the work categories to which we are responding, we are including three copies that contain the general section and the specific information requested in the RFP for the respective work category.

ECT, a registered engineering and geology firm, has eight offices in Florida and nine others nationwide. Our corporate headquarters is in Gainesville (3701 Northwest 98th Street), with other offices located in Tallahassee, Tampa, Jacksonville, Orlando, New Smyrna Beach, Fort Lauderdale, and Fort Myers. ECT's Tallahassee office will be the primary project management office for this effort. Personnel from other ECT offices will provide specific areas of expertise as needed to support the work.

As a requirement of this RFP, ECT hereby acknowledges receipt of amendments 1 and 2.

ECT has prepared this submittal to comply with all requirements outlined in the RFP. I also commit my assurance that company funds, personnel, and equipment will be available to support this project. We look forward to your favorable review of our credentials and to continuing our working relationship with the County on this contract. If you have any questions, please contact me or the project manager at the telephone/e-mails listed previously.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Larry J. Danek, Ph.D.
President

LJD/tsw
Enclosure

3701 Northwest
98th Street
Gainesville, FL
32606

(352)
332-0444

FAX (352)
332-6722

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An Equal Opportunity/Affirmative Action Employer



A. CONTRACTOR INFORMATION

Firm Name: Environmental Consulting & Technology, Inc. (ECT)
(This will not be a joint venture)

Address: 2507 Callaway Rd., Suite 102
Tallahassee, Florida 32303
850/383-0009

Technical contact: Mr. Leland A. Smith, P.E., D.WRE
lsmith@ectinc.com



B. EXECUTIVE SUMMARY

ECT is an employee-owned, Florida-registered professional engineering (CA No. 5520), geology (license No. GB42), and asbestos (ZA0000131) consulting firm, founded in 1988, that offers full-service environmental, engineering, scientific, planning, and management services. ECT's corporate headquarters is located in Gainesville, Florida; with other offices located in Tallahassee, Tampa, Jacksonville, Orlando, New Smyrna Beach, Fort Lauderdale, and Fort Myers. ECT also has 6 offices in Michigan, 1 office in North Carolina, 1 in Iowa, and 1 in Illinois.

ECT's staff includes professional engineers; hydrologists; planners; landscape architects; terrestrial, aquatic, and wildlife ecologists; oceanographers; chemists; and geologists providing services and expertise related to all aspects of professional engineering and consulting services required under this proposal, for the work categories designated herein.

Only in its 23rd year since its inception, ECT is ranked amongst the top 200 environmental firms in the United States as well as one of the top 100 fastest growing companies in Florida. ECT's success is built upon a deliberate, carefully thought-out, strategic planning and management approach developed individually for every project, that helps deploy key employees with an experience repertoire of similar projects. In addition, to enable the continued development and implementation of high quality innovative solutions to problems at hand, ECT strives to and has been successful in hiring and retaining top talents that are dedicated, experienced, and highly qualified. Many of these employees play leading roles in various national and international forums that target their niche expertise.

Although ECT has been in business for nearly a quarter-century, we have succeeded in maintaining a very minimal corporate management hierarchy, without excessive reliance on protocol or hard-and-fast territorial boundaries. Our culture of high professional standards and low bureaucracy gives us the ability to rapidly coordinate and share resources, both personnel and equipment, among ECT offices. Our local office managers and project managers are therefore empowered with the flexibility and responsiveness necessary to identify and address our clients' needs as expeditiously and as cost effectively as possible.

The project descriptions provided with this proposal provide tangible evidence of our ability to quickly and cost-effectively assess the problem, develop a solution, and implement the selected engineering options. ECT's senior professionals have extensive experience in the overall planning and management of projects throughout the United States and the world. Team members have successfully provided environmental services to a diversity of private and public sector clients throughout the United States and worldwide, involving more than 20,000 projects ranging in size from small, specialty projects with budgets of less than \$1,000 to large, multidisciplinary efforts with values in excess of \$20,000,000. More than 70 percent of these projects were conducted for repeat clients, clearly demonstrating the ECT team commitment to the highest levels of quality technical services and client satisfaction. Over the years, ECT has developed an extensive network of subcontractors and minority vendors that support successful project execution. ECT supports diversity in its procurement program for projects by regularly using qualified Minority



Business Enterprise (MBE) and Women Business Enterprise (WBE) contractors to assist and provide niche services.

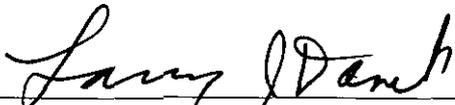
ECT is confident this proposal demonstrates the qualifications, capabilities, and commitment of ECT and its project team to satisfy Leon County requirements to successfully implement and execute services under this contract.

Through ECT's involvement in multiple governmental state, city, and county water resource engineering-related contracts, we have gained extensive technical and administrative experience pertaining to scheduling, cost control, communications, and reporting protocols on complex projects. Our years of experience in providing the required services under similar contracts further underscore our readiness to execute and manage the type of projects likely to be awarded under this contract. Many ECT work products have attracted national and regional attention and have substantially affected public policies and attitudes. Clients from both the private and public sectors use the firm's engineering, research, analytical, and advisory capacities to develop and implement engineering solutions, policies and strategic plans; improve internal management; identify stakeholder priorities and address conflicts between corporate and community interests; and identify political, regulatory, and economic factors influencing corporate and agency decisions. The firm is experienced in managing sizable contracts, adhering to deadlines, and providing professional and clearly written reports and high quality construction documents.

Larry J. Danek, Ph.D., ECT's president, will be the contact for all contractual aspects of the project. His contact information is provided:

Larry J. Danek, Ph.D.
Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, FL 32606
Phone: 352/332-0444
Fax: 352/332-6722
Email: ldanek@ectinc.com

I hereby declare that ECT's response to Leon County's proposal BC-03-17-1125 is in all respects fair and is made in good faith, without collusion or fraud. I further declare that I have the authority by this declaration to bind the principal proponent identified in this RFP response.



Larry J. Danek, Ph.D., President



C. REQUIRED FORMS

The forms required by Leon County are provided in the following pages.

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: Environmental Consulting & Technology, Inc.

Signature: *Samy J. Domb* Title: President

STATE OF Florida
COUNTY OF Alachua

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

Personally known Yes

Teresa S. Warrington
NOTARY PUBLIC

OR Produced identification _____

Notary Public - State of Florida

(Type of identification)

My commission expires: August 16, 2013
TERESA S. WARRINGTON
Notary Public, State of Florida
My comm. exp. Aug. 16, 2013
Comm. No. DD 901098
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.

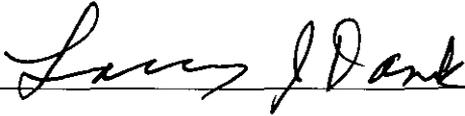
**LEON COUNTY RESERVES THE RIGHT TO REQUEST SUPPORTING DOCUMENTATION,
AS EVIDENCE OF SERVICES PROVIDED, AT ANY TIME.**

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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:

_____ Larry J. Danek, Ph.D., President

Firm:

_____ Environmental Consulting & Technology, Inc.

INSURANCE CERTIFICATION FORM

To indicate that Bidder/Respondent understands and is able to comply with the required insurance, as stated in the bid/RFP document, Bidder/Respondent shall submit this insurances sign-off form, signed by the company Risk Manager or authorized manager with risk authority.

- A. Is/are the insurer(s) to be used for all required insurance (except Workers' Compensation) listed by Best with a rating of no less than A:VII?

YES NO

Commercial General
Liability:

Indicate Best Rating: A-
Indicate Best Financial Classification: XIII

Business Auto:

Indicate Best Rating: A
Indicate Best Financial Classification: XV

Professional Liability:

Indicate Best Rating: A-
Indicate Best Financial Classification: XIII

1. Is the insurer to be used for Workers' Compensation insurance listed by Best with a rating of no less than A:VII?

YES NO

Indicate Best Rating: A
Indicate Best Financial Classification: XV

If answer is NO, provide name and address of insurer:

2. Is the Respondent able to obtain insurance in the following limits (next page) for this professional services agreement?

YES NO

Insurance will be placed with Florida admitted insurers unless otherwise accepted by Leon County. Insurers will have A.M. Best ratings of no less than A:VII unless otherwise accepted by Leon County.

Required Coverage and Limits

The required types and limits of coverage for this bid/request for proposals are contained within the solicitation package. Be sure to carefully review and ascertain that bidder/proposer either has coverage or will place coverage at these or higher levels.

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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 Katherine H. Pierce
Typed or Printed

Signature 

Date March 10, 2011

Title Senior Vice President
(Company Risk Manager or Manager with Risk

Authority)

RFP Title: Request for Proposals for Civil Engineering Services, Continuing Supply
Proposal Number: BC-03-17-11-25
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**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

Larry J. Danek, Ph.D., President

Title

Environmental Consulting & Technology, Inc.

Contractor/Firm

Headquarters: 3701 NW 98th Street; Gainesville, FL 32606

Address
Local office: 2507 Callaway Road, Suite 102; Tallahassee, FL 32303

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: Environmental Consulting & Technology, Inc.
Current Local Address: 2507 Callaway Road, Suite 102 Tallahassee, FL 32303
Phone: 850/383-0009 Fax: 850/383-0008
Home Office Address: 3701 NW 98th Street Gainesville, FL 32606
Phone: 352/332-0444 Fax: 352/332-6722

Signature of Authorized Representative: Larry J. Danek

Date: March 10, 2011

STATE OF Florida
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 10th day of March, 2011.

By Larry J. Danek, Ph.D., President of Environmental Consulting & Technology, Inc.
(Name of officer or agent, title of officer or agent) (Name of corporation acknowledging)

a Delaware corporation, on behalf of the corporation. He/she is personally known to me
(State or place of incorporation) (Authorized to conduct business in Florida [P22824])
or has produced as identification.

Signature of Notary: Teresa S. Warrington
TERESA S. WARRINGTON
Notary Public, State of Florida
My comm. exp. Aug. 16, 2013
Comm. No. DD 901098
Senior Administrative Coordinator
Title or Rank
Notary DD901098
Serial Number, If Any

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



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APPENDICES

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STORMWATER ENGINEERING

SW-A. ABILITY OF PROFESSIONAL PERSONNEL

SW-A.1. Professionals Available for Assignment

This section describes the total number of ECT professionals who may be assigned to the project in this work category, and their availability to provide services on relatively short notice for the small to medium size projects that are contemplated in this contract.

ECT has identified 29 key ECT professionals on the organization chart (see Figure SWA-1) as the primary individuals to provide services in the stormwater engineering work category (licenses and registrations are provided in Appendix A). These personnel are listed on the following table to indicate projected/ known commitments for the year 2011, and estimates of their total manhours available for the project. The anticipated availability of these personnel (over 13 man-years in 2011 alone) is more than sufficient to complete the tasks anticipated under this contract. If additional manhours are needed, ECT has adequate backup staff based in its eight Florida offices.

Name	Project Assignment	Committed Percent for 2011	Available Percent for 2011*	Available Manhours
Leland Smith, P.E., D.WRE	Project Manager; Stormwater Engineering; Task Manager—Construction Administration	35	50	1,040
Ronald Potts, P.E., P.G.	Assistant Project Manager	35	50	1,040
Larry Danek, Ph.D.	Project Director	30	55	1,144
Chris Fagerstrom, P.E.	Task Manager—Stormwater Engineering	35	50	1,040
Gary Cook	Task manager—Planning	40	45	936
Ivan Chou, P.E.	Task manager—Modeling; Expert Witness Services	37	48	998
Jing-Yea (Paul) Yang, Ph.D., P.E.	Task manager—Water Quality; Modeling	37	48	998
Brad Pekas, P.E., P.G.	Task manager—Expert Witness Services	35	50	1,040
Lisa Ricker, PWS	Task manager—Wetlands and Ecology	45	40	832
Sanjiv Sinha, Ph.D., P.E.	Task manager—TMDL Technical Support	37	48	998
Lealy Norris	Task manager—Field Services	37	48	998
Maria Cruz	Task manager—GIS/CADD	25	60	1,248



*Stormwater Engineering
Leon County Request for Proposals No. BC-03-17-11-25*

Name	Project Assignment	Committed Percent for 2011	Available Percent for 2011*	Available Manhours
Ron Edenfield, P.E.	Stormwater Engineering	35	50	1,040
Brad Vance, P.E.	Planning; Stormwater Engineering	45	40	832
Steve Danskine, P.E.	Stormwater Engineering	50	35	728
Domenick Tufariello, P.E.	Stormwater Engineering	65	20	416
Steve Provost, P.E.	Stormwater Engineering	55	30	624
Aniruddha Guha	Stormwater Engineering, GIS/CADD	45	40	832
Darren Stowe, AICP	Planning	50	35	728
Ahmed Said, Ph.D., P.E.	Modeling	37	48	998
Doyle Cottrell, P.E.	Construction Administration	45	40	832
David Sanders, E.I.	Construction Administration	35	50	1,040
Chang-Xing Jin, Ph.D., P.E.	Modeling; Water Quality; TMDL Technical Support	43	42	824
Annette DeMaria, P.E.	Water Quality, TMDL Technical Support	35	50	1,040
Anthony Arcuri	Expert Witness Services	40	45	936
James Poppleton	Wetlands and Ecology	40	45	936
Maya Scohier	Wetlands and Ecology	40	45	936
Gary Dalbec	Field services	35	50	1,040
Michael Racca	GIS / CADD	30	55	1,144
TOTAL				27,238

*Based on maximum of 85 percent.

SW-A.2. Brief Resumes of Key Project Personnel

This section provides brief resumes for key ECT personnel to be assigned to the project under this work category. Note that some personnel are proposed to fill more than one role. An organizational chart for this project is also presented for reference as Figure SWA-1. Resumes for other ECT personnel shown in the organizational chart are provided in Appendix B. ECT has adequate resources to assign additional personnel if needed to perform work related to the contract. The summary information provided in this section is, however, limited to the key team member assignments identified in the preceding section. Key personnel are the project manager, alternate project manager, project director, and task managers.



PROJECT DIRECTOR

Larry Danek, Ph.D.

- Principal-in-charge
- Client satisfaction
- Project quality management
- Alternate point of contact
- Company resources

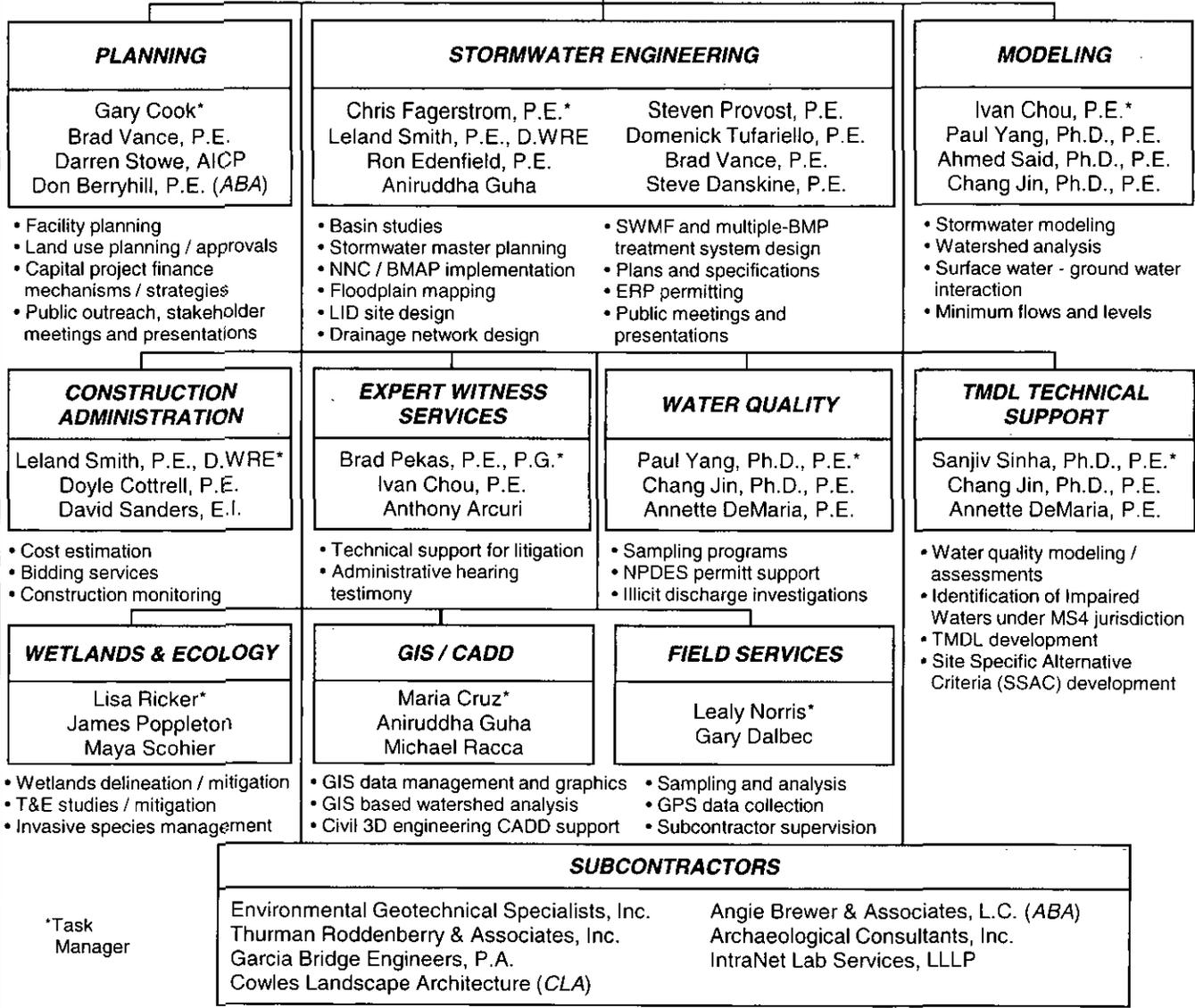
PROJECT MANAGER

Leland Smith, P.E., D.WRE

ASSISTANT PROJECT MANAGER

Ronald Potts, P.E., P.G.

- Primary point of contact
- Client satisfaction
- Budgets / schedules
- Project team coordination
- Public meetings and presentations



*Task Manager

FIGURE SWA-1.

**PROJECT ORGANIZATION AND KEY PERSONNEL
STORMWATER ENGINEERING**

Source: ECT, 2011.





**PROJECT MANAGER—STORMWATER ENGINEERING; TASK MANAGER—
CONSTRUCTION ADMINISTRATION**

1. **Name and Title:** Leland Smith, P.E., D.WRE, Senior Engineer
2. **Job Assignment for Other Projects:** Work assignments include project manager for multidisciplinary project teams, and engineer of record for civil, environmental and water resources design and construction projects. His project experience includes serving in senior project manager and lead design engineer roles in private sector land development and public sector stormwater infrastructure projects.
3. **How Many Years with This Firm:** Employed by ECT for 4 years.
4. **How Many Years with Other Firms:** After graduating with a B.S. degree in 1991 and prior to joining ECT, Mr. Smith was employed for a total of 11 years by other consulting firms, and 5 years by state government environmental agencies.
5. **Experience:** A wide variety of civil, environmental and water resources projects from both regulatory and consulting perspectives. His consulting experience includes 15 years of progressively responsible consulting project management assignments leading locally-, regionally-, and globally-distributed multidisciplinary teams. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$1.3 million on a large, multi-year environmental management system implementation project. Specific project involvement has typically been as project manager, project engineer and/or engineer of record.
6. **Education:** M.S. in Civil Engineering
B.S. in Civil Engineering
7. **Active Registrations:** Professional Engineer in Florida, Alabama, Georgia, Idaho and Maryland; Florida Department of Environmental Protection (FDEP) Qualified Stormwater Management Inspector.
8. **Other Experience and Qualifications Relevant to this Project:** Mr. Smith is the engineering manager in ECT's Tallahassee office, and can be available if needed to meet with Leon County project staff with as little as 15 minutes notice. His experience with surface water quality issues in Florida dates back to his participation in production of the 1988 305(b) water quality report as an OPS environmental specialist working for the Florida Department Environmental Regulation (now FDEP). Since that time, he has worked over 18 years of his engineering career in Leon County, and has served as project manager and project engineer in a wide variety of local government projects in north Florida. Mr. Smith has been certified as a Diplomat, Water Resources Engineer (D.WRE) by the American Academy of Water Resources Engineers, and has been designated as a Model Law Engineer by the National Council of Examiners for Engineering and Surveying. From 2002



to 2003, during Mr. Smith's term as President of the Florida Water Environment Association, Big Bend Chapter, he led the effort to organize and present the chapter's first and second annual technical seminars, which have become a model for other chapters within the state to follow, and which continue to be held annually to the present time. Mr. Smith is active in the American Water Resources Association, Florida Section, and served on the organizing committee for the March 2011 bi-monthly meeting of the state association at Florida's State Capitol building.

Examples of Mr. Smith's relevant project experience include the following:

Engineer of Record/Project Manager; Avenue C North Drainage Improvements for the City of Carrabelle—Provided construction grant application, engineering design, permitting, bidding and construction phase services for retrofit of existing drainage infrastructure located in the City of Carrabelle to address localized flooding and sediment control issues. Improvements included: (1) replacement of an existing dry detention pond, previously permitted to serve a 7-acre drainage area, with a larger wet detention pond to treat runoff from a 27.5-acre urbanized contributing area; (2) retrofit of an existing, sediment-filled cross-drain with a sediment trap; and (3) stabilization of upstream scour-prone areas to reduce erosion and sedimentation

Engineer of Record/Project Manager; County Road-30A Drainage Improvements for the City of Carrabelle—Provided construction grant application, engineering design, permitting, bidding and construction phase services for replacement and hardening of a failing double 60-inch cross-drain, headwall and endwall system, stabilization of erosion prone areas, and creation of a quiescent pool upstream from the cross-drains to provide for erosion control and sediment removal.

Project Manager, Engineering Services During Construction; Lake Munson Restoration Project, Phase I, for the Leon County Public Works Department—Managed engineering services during construction of this initial phase of the Lake Munson restoration project, which included restoring a filled historical lakebed to create a 25-acre stormwater attenuation and treatment pond, excavating a 35-acre sediment delta from the bottom of Lake Munson, and restoring 2 miles of eroded channel upstream from Lake Munson by establishing a more stable, vegetated/armored channel. The project also included construction of a system of hydraulic control structures (dams, weirs and gates), restoration of a more natural hydroperiod in wetlands adjacent to the project area, and provisions for removal of sediment and trash.

Project Engineer; Environmental Resource Permit (ERP) Program Support for the Northwest Florida Water Management District (NWFWD)—Assisted the District with implementation of its Phase I and Phase II ERP program by providing complete technical reviews of more than 30 ERP application



packages, including performance of ground-truthing inspections, review of construction plans and specifications, stormwater design calculations and related documentation, and preparation of permits for issuance.

Engineer of Record/Project Manager; Engineering and Permitting Services for Hydraulic Control Modifications on an Agricultural Impoundment for Silver Lake Dairy—Provided hydraulic analysis, engineering design and ERP permitting services for a hydraulic control system retrofit, to modify an existing Suwannee River Water Management District (SRWMD) permit for an agricultural impoundment with a failed overflow system in Jefferson County, Florida.

Project Manager/Engineer of Record; Permitting of New Planned Unit Development and Design of Phase I Final Development Plan, Monticello Plantations, LLC—Civil engineering planning, design and permitting services for water, sewer, roadways, grading, and stormwater infrastructure in the 115-acre first phase of a new 421-acre single-family detached housing residential planned unit development (PUD) in Monticello, Florida, including 133 residential units, common area parks and walking/cycling trails. The design for this curb-and-gutter development includes approximately three miles of streets and drainage. Stormwater management facilities designed include six wet detention ponds and one bioretention basin.

Engineer of Record/Project Manager; Engineering and Permitting Services for a Borrow Pit Facility for a private industrial client—Provided engineering design and comprehensive SRWMD ERP services for a 55-acre borrow pit facility in Taylor County, Florida.

ASSISTANT PROJECT MANAGER

1. **Name and Title:** Ronald Potts, P.E., P.G., Senior Engineer
2. **Job Assignment for Other Projects:** Work assignments include design engineer for soil and groundwater remediation systems, geologic review and assistance on groundwater contamination assessments and Phase I and Phase II ESAs, project manager, and client manager.
3. **How Many Years with This Firm:** Mr. Potts has worked full time for ECT for the past 6 years. Prior to that time, he worked for ECT on a part-time basis for over 4 years.
4. **How Many Years with Other Firms:** Mr. Potts has worked for 24 years in the Tallahassee area, mostly with other consulting firms, but also for about 7 years with NFWMD.



5. **Experience:** Experience in a variety of projects as well as project and line management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$100,000 on large contamination assessment and remedial design projects. Specific project involvement was primarily as the lead geologist or engineer and/or project manager.
6. **Education:** B.A. in Physical Sciences—Geology/Physics
M.S. in Geological Engineering
7. **Active Registrations:** Professional Engineer in Florida, Alabama, Arkansas, Colorado, and Georgia. Professional Geologist in Florida.
8. **Other Experience and Qualifications Relevant to this Project:** As the assistant project manager, Mr. Potts will assist the project manager as needed with administrative and project team coordination activities, routine project administrative matters, and maintenance of an effective interface with subcontractors.

Examples of Mr. Potts' relevant project experience include the following:

Project Manager; Continuing Civil Engineering and Environmental Consulting Services, Leon County—Responsible for overall execution of this active contract to provide general environmental services to the County on an as-needed basis. Duties include obtaining task assignments and assuring client satisfaction as well as managing projects and providing professional guidance for staff engineers and geologists. Project includes Phase I/II environmental site assessments (ESAs), contamination assessments, remedial action planning and design, construction oversight for underground storage tank (UST) sites, hazardous waste projects, air permitting, wetlands delineation, ecological studies and other environmental support services as requested.

Project Manager; Continuing Civil Engineering and Environmental Consulting Services, City of Tallahassee—Responsible for managing projects and providing professional guidance to project engineers and scientists working on this continuing services contract. Project services include Phase I/II ESAs, contamination assessments, remedial action planning and design, construction oversight for UST sites, stormwater engineering, hazardous waste projects, air permitting, wetlands delineation, ecological studies and other environmental support services.

Project Manager; Continuing Services Agreement for Contractual Services, NFWFMD—Ongoing contract for providing professional, technical and field assistance for newly authorized ERP program for the NFWFMD. Responsible for client satisfaction and coordinating personnel needs with the NFWFMD, including placement of ECT personnel either part time, as needed, or full-time in NFWFMD offices. Performed ongoing permit application reviews.



Senior Hydrologist; Division of Resource Management, NFWFMD—Engineering design and planning tasks for various projects relating to stormwater, surface water quality, groundwater, water supply planning, and other similar areas of study. Prepared and managed Phase I ESAs, boat ramp and erosion control designs on District lands, and other engineering projects for Lands Division.

Senior Engineer and Geologist; Consulting Firm—Conducted various environmental, engineering and geological projects relating to stormwater, wastewater, petroleum and hazardous waste, soil and groundwater. Prepared permits for FDEP and water management district review.

Technical Director/Department Manager; Consulting Firm—Provided professional guidance and reviewed performance of staff engineers and geologists. Projects included ESAs, contamination assessments, remedial action planning and design, construction oversight for underground storage tank sites, hazardous waste projects, and air permitting.

PROJECT DIRECTOR/PRINCIPAL-IN-CHARGE

1. **Name and Title:** Larry Danek, Ph.D., President and Principal Scientist
2. **Job Assignment for Other Projects:** Project director and project manager in a wide variety of multidisciplinary projects, and principal investigator for research projects.
3. **How Many Years with This Firm:** Dr. Danek has worked for ECT for 23 years.
4. **How Many Years with Other Firms:** Prior to ECT, Dr. Danek worked for other consulting firms for an additional 16 years.
5. **Experience:** Experience in a variety of projects as well as project and line management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$20,000,000 for a large brownfield contamination assessment, remediation and site redevelopment project. Specific project involvement has typically been as project manager, project director and/or principal investigator.
6. **Education:** Ph.D. in Physical Sciences
M.S. in Physical Sciences
B.S. Geological Oceanography
7. **Active Registration:** Not applicable.



8. **Other Experience and Qualifications Relevant to this Project:** As the president of ECT, Dr. Danek will commit the necessary ECT resources to ensure the project manager has sufficient resources and experienced personnel to complete all work under this contract on time and within budget.

Examples of Dr. Danek's relevant project experience include the following:

Project Director; Environmental Consulting Services, Leon County—Assisting project manager and staff in all areas necessary to ensure quality environmental consulting services are provided to the client's satisfaction.

Project Manager; East Gainesville Depot Park Brownfields Redevelopment Program, Gainesville Regional Utilities/City of Gainesville—Responsible for management and administration of a project to remediate coal tar and other hazardous contaminants from a brownfield site near downtown Gainesville and redevelop the site as a regional stormwater park. A regional stormwater treatment basin has been designed to provide treatment for 89 acres of downtown Gainesville. A multiple best management practice (BMP) approach was taken, including the use of pretreatment units and wetland polishing along with the use of a wet detention basin containing various native plant species to remove contaminants including sediment and nutrients prior to discharge to Sweetwater Branch. Responsibilities also include coordination between multiple agencies in the remediation clean-up, site development, and permitting phases of the project. The site is currently undergoing remediation, with funding assistance from FDEP.

Facilitator; Lower St. Johns River Technical Advisory Committee (TAC)—As a subcontractor, served as a facilitator for 3 years for the TAC, which included organizing and leading planning meetings for addressing concerns and preparing an action plan for the St. Johns River. Duties also included prioritizing and ranking special projects for funding through direct legislative appropriation.

Project Director; Dog Branch-Edgefield Regional Stormwater Treatment System, St. Johns River Water Management District (SJRWMD)—Participated in the management and design of a planting plan for a 56-acre stormwater treatment facility. The system was designed to utilize plants to remove phosphorus, nitrogen, and sediment from agricultural pollution sources and polish the stormwater prior to release into the St. Johns River near Palatka.

Project Technical Director; Wayne County Rouge River National Wet Weather Demonstration Program, Assessment of Toxic Contaminants and Restoration of Newburgh Lake—Provided technical oversight for a team of aquatic biologists and chemists investigating the occurrence and distribution of toxic metals and organic compounds. Emphasis is placed on contaminants identified in Great Lakes Initiative (GLI) guidance document as bioaccumulative chemicals of concerns (especially mercury and PCBs). The sampling program, implemented in 1996, focused on establishing the occurrence, impact, and potential sources of



toxics in water, sediment, and fish throughout the watershed. After initial studies were completed, restoration plans were prepared in 2000; remediation of the lake included removal of sediments contaminated with PCBs and metals. The lake bottom was recontoured and native wetland species were planted to remove contaminants.

Project Manager; Rodman Reservoir Restoration Environmental Assessment, SJRWMD—Conducted three separate projects to help assess the potential environmental impacts of restoring the 6,000-acre Rodman Reservoir in Putnam and Marion Counties, Florida, to its original riverine conditions. These studies included: (1) bathymetric and sediment thickness survey to determine the reservoir volume and sediment volume within the reservoir; (2) water quality and sediment quality surveys to determine the past, the present, and predict the future sediment and water quality conditions under various restoration scenarios; and (3) forest restoration modeling using FORFLO to predict the revegetation of the reservoir under 256 different scenarios of restoration, planting, and hydrologic conditions.

TASK MANAGER—PLANNING

1. **Name and Title:** Gary Cook, Staff Engineer II
2. **Job Assignment for Other Projects:** Prior to beginning employment with ECT, Mr. Cook led in the establishment of the Volusia County Stormwater Utility, where he served as the utility's program manager. During his time at ECT, he has provided stormwater utility feasibility consultation to the City of Fort Myers. He is also experienced in public meeting facilitation and numerous aspects of stormwater management and design. He has additionally provided QA/QC reviews for various kinds of regulatory stormwater submittals.
3. **How Many Years with This Firm:** Mr. Cook has worked for ECT for 3 years.
4. **How Many Years with Other Firms:** As mentioned above, Mr. Cook was employed by Volusia County for 10 years before joining ECT. He also spent 14 years as an employee of the SJRWMD.
5. **Experience:** Mr. Cook's experience varies from water resource engineering with SJRWMD to project engineer and director of the Volusia County Stormwater Division, and on to his current role as a project manager and consultant in stormwater projects for ECT's clients. During his career, he has been involved with projects valued at a few thousand dollars up to multi-million-dollar projects for the design and construction of stormwater treatment systems.
6. **Education:** B.S. in Civil Engineering
7. **Active Registration:** Not applicable.



8. **Other Experience and Qualifications Relevant to this Project:** Mr. Cook was the Volusia County stormwater utility director for 10 years, during which time he developed the County's stormwater utility. His recent project experience includes assisting ECT's Fort Myers office engineering staff in the development of a stormwater utility for the City of Fort Myers Beach.

Examples of Mr. Cook's relevant project experience include the following:

Task Manager; Cardinal Lane Stormwater Master Plan QA/QC Review, Southwest Florida Water Management District (SWFWMD)—Responsible for QA/QC for key elements of a major watershed plan. Cardinal Watershed is 32,000-acre coastal basin with a tidally influenced, coastal receiving water for surface water; with groundwater inputs from higher elevations in the watershed. Located on the west central Florida coast, it is a basin designated by the SWFWMD and Citrus County as a priority watershed. The resulting watershed study involved an analysis and modeling of floodplains and inventory of drainage infrastructure using LiDAR technology and specially developed GIS tools for mapping and data collection.

Project Manager; Fort Myers Stormwater Utility Implementation—Provided a summary evaluation of the city stormwater program needs and funding requirements based on a recent updated stormwater master plan. Reviewed the existing stormwater ordinance and made recommendations for revisions to include more efficient program administration and fee collection, fee credits, and updates to ERU values. Developed rate structures to establish the annual revenues desired for sustainable program implementation and operation. A final summary report was presented to the city in July 2008.

Task Manager; ERP Assistance, NFWMD—Technical support services to the District for the ERP permitting program under chapter 62-346 F.A.C. Responsible for review of surface water permit applications to ensure design and analysis meets the applicable rule for stormwater management systems. Technical and administrative review includes water quality design, flood attenuation, recovery analysis, field evaluation review, and technical writing of staff reports.

Task Manager; Spruce Creek Basin B-21 Watershed Plan Update, Volusia County—Organized project presentation and public workshops. Served as a client liaison in development of the project updates, and performed quality assurance support for draft and final report submittal.

Program Manager; Volusia County Stormwater Utility—Responsible for project development, management, and implementation of an annual \$4.5 million stormwater utility program. Scope of duties included planning, budgeting, and construction of capital improvement projects to reduce flooding and improve surface water quality; establishing a countywide stormwater maintenance and infra-



structure replacement program; developing watershed management plans; and to address state and federal regulatory programs, primarily National Pollutant Discharge Elimination System (NPDES) annual reporting and establish total maximum daily load (TMDL) program strategies.

Staff Engineer; Permits and Compliance, SJRWMD—Responsible for engineering review of plans, reports, and calculations for the Surface Water Permitting program. Required extensive knowledge of technical and statutory requirements to ensure permitting criteria was satisfied. Facilitated mini-workshops with developers, engineers, and local government regarding District rules and procedures. In addition, post permit compliance included field inspections during various phases of construction. Inspections included review of construction staging, erosion and sediment controls, and adherence to permitted construction plans. Implemented a proactive approach to permit compliance by offering site-specific stormwater inspection training programs to contractors, District compliance staff, and other agencies, such as the Florida Department of Transportation (FDOT).

TASK MANAGER—STORMWATER ENGINEERING

1. **Name and Title:** Chris Fagerstrom, P.E., Senior Engineer
2. **Job Assignment for Other Projects:** Mr. Fagerstrom has served as project manager and stormwater engineer for water resource-related projects throughout the state. He has provided services for SJRWMD, South Florida Water Management District (SFWMD), and SWFWMD in addition to many municipalities and county stormwater agencies.
3. **How Many Years with This Firm:** Mr. Fagerstrom has worked for ECT for 12 years.
4. **How Many Years with Other Firms:** 1 year.
5. **Experience:** Mr. Fagerstrom's past experience includes water resource modeling, stormwater sampling and data collection, providing engineering evaluations, and designing stormwater systems to prevent or alleviate flooding. Mr. Fagerstrom has also provided construction oversight of his designs. He has also been involved in securing grant money and loans for his governmental agency clients to complete stormwater projects.
6. **Education:** B.S. in Environmental Engineering
7. **Active Registrations:** Professional Engineer in Florida; FDEP Qualified Stormwater Management Inspector.



8. **Other Experience and Qualifications Relevant to this Project:** Mr. Fagerstrom's 12 years of experience in stormwater engineering makes him highly qualified to provide the requested services for Leon County. He has provided similar services for Alachua, Volusia, and Seminole Counties during his career at ECT. Mr. Fagerstrom's projects have ranged in size from a few thousand dollars to over half a million (consulting fees—not including construction).

Examples of Mr. Fagerstrom's relevant project experience include the following:

Project Engineer; Depot Park Brownfield Restoration, City of Gainesville—Instrumental in the redevelopment of a 35-acre site located south of the city's downtown and within its designated Enterprise Zone, where significant soil and groundwater contamination had been identified as a result of a former manufactured gas plant operation and historic railway activity. Assisted in the preparation of a quality assurance project plan (QAPP), and participated in community outreach meetings and public presentations to educate the surrounding community on this brownfield redevelopment project. Project tasks included site assessment, human health and ecological risk assessment, feasibility study, remedial action planning, permitting, reuse planning and design and construction oversight of a unique stormwater park capable of treating storm water runoff from the downtown area. This project is widely thought to be one of the State's most successful brownfield projects.

Project Manager; B-21 Watershed Management Plan, County of Volusia, Florida—Conducted a study to develop capital improvement project to eliminate/reduce flooding and improve water quality for a portion of the Spruce Creek watershed in southeast Volusia County. The project utilized LiDar data to develop a digital terrain model that was used to develop subbasin delineation using Arc-Hydro tools. The project also included an extensive field effort to inventory structure and channel within in the study area. Project recommendations include the modification of county-owned land to impound runoff, thereby reducing downstream flooding, promoting groundwater recharge and wetland enhancement

Project Engineer; Lake Monroe and Lake Harney Water Quality Monitoring, SJRWMD—Conducted the composite stormwater sampling of tributaries to Lake Monroe and Harney to assess runoff characteristic of various types of land use and land cover. The intent of the study was to establish baseline data to be used in water quality modeling of Lake Monroe and Lake Harney. Samples are collected using ISCO samplers. Data were accessed and the systems were monitored remotely.

Project Manager; Lake Gibson Southwest Drainage Basin Retrofit Project, City of Lakeland—The Lake Gibson Southwest Basin is a heavily urbanized basin that drains into the 303d listed Lake Gibson. This basin contributes a large volume of sediment and other pollutants into the Lake. Consequently a delta has formed at the basin's outfall. ECT conducted a Watershed Management Plan in



conjunction with SWFWMD to evaluate alternatives for addressing the situation. The selected alternative consisted of cascading flow through wetland treatment systems that would reduce the erosive velocities and provide additional nutrient removal prior to discharging to the Lake. ECT designed two flow-through marsh systems, a settling basin, and wetland restoration area as the final BMPs to be implemented. Project tasks included watershed evaluation and modeling (ICPR) preliminary design, construction drawing preparation, environmental resource permitting and construction phase services.

Project Manager; Cardinal Lane Watershed Management Plan, SWFWMD—Currently preparing a watershed management plan for a 50 square mile drainage basin in Citrus County in accordance with the SWFWMD's guidelines and specifications. The project includes developing a GIS database for the basin that includes development of topographic information, digital terrain, inventoried structures, update land use, soils, ICPR and groundwater modeling, 100 and 500-year floodplain mapping, and utilization of ArcHydro tools and the basin junction-reach network. The watershed management plan includes preparing a watershed evaluation plan, floodplain analysis, surface water assessment, and a BMP alternative analysis.

Project Manager; Chassahowitzka River Basin Watershed Management Plan, SWFWMD—Conducting watershed modeling, LIDAR mapping and development of digital elevation model, watershed delineation, watershed inventory, digital flood insurance rate maps, GIS/ArcHydro, BMS, and GWIS database as part of the plan.

Project Manager; Cambridge Basin Stormwater Quality, Quentin L. Hampton & Associates, Inc.—Conducted stormwater quality monitoring, QAPP preparation, and final monitoring report as part of a total maximum daily load grant. Nine sample events were collected at the inflow and outflow of the system to access the system's pollutant removal efficiency. Pollutant loads were developed based on the flow data collected and a final monitoring report was prepared.

Project Manager; Tributary "E" Stormwater Park, Volusia County—Conducted design and construction administration service for a 15-acre stormwater park in southeast Volusia County, Florida. The offline treatment system will serve a 1,100-acre watershed. The site design includes grading and drainage plans, precast restroom building, asphalt parking, irrigation and pond aeration, 3,300+ feet of walking trail. Other tasks completed for this project include watershed modeling using SWMM, wetland restoration, and stormwater pollution prevention plan preparation.

Project Manager; Salvador Avenue Stormwater Lift Station Feasibility Study, Volusia County—Evaluated the potential for constructing a stormwater lift station to resolve an existing house flooding problem. Project tasks include ICPR modeling of the existing system and the proposed lift station as well as cost



estimates for the proposed lift station and purchase and demolition of the existing home.

Project Manager; GASB 34 Stormwater Infrastructure Inventory, New Smyrna Beach—Conducted a GIS inventory of the City of New Smyrna Beach's stormwater infrastructure, evaluating the system life, current value, and software available that may aid the City in maintenance.

Project Engineer; Lake Gibson Southwest Drainage Basin Watershed Management Plan, City of Lakeland—Prepared a watershed management plan for the Southwest Basin of Lake Gibson in accordance with the SWFWMD's guidelines and specifications. The project includes developing a GIS database for the basin that includes inventoried structures, update land use, soils, digital terrain model, 100- and 500-year floodplain mapping, and the basin junction-reach network. The watershed management plan includes preparing a watershed evaluation plan, floodplain analysis, surface water assessment, and a BMP alternative analysis. This project is funded through a cost share program with the SWFWMD.

Project Manager; Lake Jesup Stormwater Sampling, Seminole County—Conducting the 6th year of composite stormwater sampling on eight tributaries to Lake Jesup. Samples are collected automatically by ISCO samplers. The stations are automated and measure velocity, level and calculate flow rates. In addition, the stations are equipped with telemetry and notify field technicians when a sampling event occurs.

Project Engineer; Stormwater Management Plan, Town of Melbourne Village—Conducted engineering studies to develop a comprehensive stormwater management plan for the Town of Melbourne Village in Brevard County, Florida. The study involved a comprehensive evaluation of present and future hydrologic/hydraulic conditions as well as stormwater quantity and quality, nonpoint source pollutant loadings, and BMP alternatives to correct flooding and water quality problems. AdICPR and the spreadsheet model WTM were used for performing water quantity and water quality evaluations.

TASK MANAGER—MODELING; EXPERT WITNESS SERVICES

1. **Name and Title: Ivan Chou, P.E., Principal Engineer**
2. **Job Assignment for Other Projects:** Mr. Chou's project experience includes a multitude of assignments as project manager and engineer of record for design projects, or principal investigator for studies. His past assignments include many projects requiring special expertise in the design and construction of projects related to water resources, and in modeling of surface water systems. Mr. Chou has worked in at least 10 countries on three continents, but the vast majority of his



projects have been located in the southeastern U.S., and in the state of Florida in particular.

3. **How Many Years with This Firm:** Mr. Chou has been employed by ECT for 19 years.
4. **How Many Years with Other Firms:** Previous to his tenure at ECT, Mr. Chou was employed for 16 years by other firms.
5. **Experience:** Mr. Chou's project experience covers all aspects of stormwater and surface water engineering, hydraulic and hydrologic modeling, and water quality modeling. He has additionally provided expert witness services for numerous high-profile water resources related projects in Florida. Mr. Chou's projects have ranged from a few thousand dollars to several hundred thousand. Mr. Chou is highly sought after for his skills and expertise in the area of water resource modeling.
6. **Education:** M.E., Coastal and Oceanographic Engineering
B.S., River and Harbor Engineering
7. **Active Registrations:** Professional Engineer, Florida (civil and structural), Georgia, North Carolina, South Carolina, Texas and Virginia.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager for civil engineering services, Mr. Chou's main role will be to provide technical leadership in all civil engineering assignments. He will also support the project team with modeling and expert witness services as needed.

Examples of Mr. Chou's relevant project experience include the following:

Project Manager; Lake Monroe Minimum Flows and Levels (MFLs) Assessment, SJRWMD—Conducted human use and water resource values (WRVs) assessment for Lake Monroe minimum levels considered by SJRWMD. Conducted hydrologic and frequency/duration analyses to determine if the MFLs for Lake Monroe would protect each of the 10 WRVs under consideration, according to Section 60-40.473, F.A.C. Performed statistical analyses of the Lower St. Johns River (LSJR) EFDC model simulation results for a 5-year period to quantify the salinity regime changes caused by various freshwater withdrawal scenarios and to evaluate the water use effects on the estuarine ecology.

Project Manager; Hydrodynamic and Water Quality Modeling of the Gemini Springs Run for MFLs Assessment, Intera/SJRWMD—Conducting modeling of Gemini Springs Run for SJRWMD using CE-QUAL-W2 model, to evaluate the effect of water withdrawals from Gemini Springs on water quality (e.g., water temperature, specific conductance, and color, etc.). The model will be calibrated



by monthly water quality samples collected at 11 stations. Ten-year continuous simulations will be conducted for both the baseline and the MFLs conditions.

Project Manager; Development of Environmental Resource Constraints for the Upper Santa Fe River, New Fields Company/SJRWMD—Conducted hydrologic analysis and environmental resource assessment to evaluate the relation between reductions in stream flow/level and environmental harm to the Upper Santa Fe River. The evaluation was based on soil and vegetation coverage, frequency-duration analysis of the HEC-RAS model simulation results, and the identification of the most restrictive dominating water resources values, described in Rule 62-40.473, F.A.C., for the river reach. The results may be used by SJRWMD to make permitting action decisions for future consumptive use permits.

Project Manager; Lower Suwannee River EFDC Model, Water Resource Associates/SRWMD—Conducted hydrodynamic modeling of the Lower Suwannee River and Suwannee Sound using the 3-dimensional EFDC model. Conducted continuous modeling for a 4-year period to project salinity distribution in the estuary under various freshwater withdrawal scenarios. The model results were used to evaluate water use impacts on submerged aquatic vegetation, shellfish communities, fish habitats, and wetland vegetation; and to develop MFLs for the Suwannee River.

Project Manager; Environmental Assessment for MFLs Development in St. Johns River near Deland, SJRWMD—Conducted environmental assessment of the MFL regime recommended by SJRWMD for the St. Johns River between State Road 40 and Lake Monroe. Per requirement of Section 60-40.473, F.A.C., ECT determined whether the MFL regime would provide protection to water resources values, including recreation in and on the water, fish and wildlife habitats and the passage of fish, estuarine resources, transfer of detrital material, maintenance of freshwater storage and supply, aesthetic and scenic attributes, filtration and absorption of nutrients and other pollutants, sediment loads, water quality, and navigation.

Project Manager; Sampson River Hydraulic Structure Assessment, SRWMD—Conducted a hydrologic and hydraulic assessment to evaluate the potential effects of a proposed hydraulic structure modification in Sampson River near the outlet of Lake Sampson in Bradford County, Florida. The assessment included the consideration of flooding, ecology, and water quality impacts.

Project Manager; Cannon Creek Basin Assessment, SRWMD—Conducted a hydrologic and water quality assessment for Cannon Creek Basin in Columbia County, Florida. Conducted extensive field investigation and data analysis to identify flooding and water quality problems in the watershed. Provided conceptual solutions for the identified problems, including hydraulic structure improvement, stormwater detention and treatment, best management practices, maintenance, management of septic tanks, and establishment of basin-specific criteria.



Project Manager; Marina Engineering Investigation, Zhejiang Nine Dragons Development Company, Ltd./Applied Technology and Management—Conducted marina site investigation and engineering evaluation for a resort marina facility in Hangzhou Bay near Zhapu, Zhejiang Province, approximately 100 km southwest of Shanghai, China. The investigation included tide, current, storm surge, waves, bathymetry, sediments, and geotechnical issues. Assessed engineering feasibility of the proposed sites and recommended an alternate marina plan.

Project Manager; Scientific Peer Review of Ecologic Evaluation of Blue Spring Minimum Flow Regime, SJRWMD—Conducted independent scientific peer review of *Human Use and Ecological Evaluation of the Recommended Minimum Flow Regime for Blue Spring and Blue Spring Run, Volusia County, FL*, in accordance with Rule 373.042(4)(a), Florida Statutes. Rendered opinion and recommendation based on the result of the review.

Project Manager; Independent Peer Review of Magnolia Bay Marina, SRWMD—Conducted independent peer review of an ERP application for a proposed 374-slip marina near Dekle Beach, Florida. Reviewed permit documents and evaluated water quality and hydrodynamic impacts of the proposed marina and the construction activities. Rendered opinion and recommendation based on the result of the review.

Project Manager; Maximum Probable Flood (MPF) Analysis for Fortuna Reservoir, El Paso Corporation—Conducted hydrologic and hydraulic modeling to evaluate the existing design capacity of the Fortuna Reservoir and spillway at a hydroelectric power plant in northwest Panama. Evaluated the probable maximum precipitation (PMP), conducted MPF analysis, wind wave analysis, wind setup, and wave runup calculations.

Task Manager; Hydraulic Design for Hickory Mound Impoundment, Florida Fish and Wildlife Conservation Commission—Conducted hydraulic modeling and designs to stabilize the levee surrounding Hickory Mound Impoundment, a 1,800-acre wildlife management area in Taylor County, Florida. Provided hydraulic design to minimize erosion and to prevent levee damage during a 50-year storm surge event. Also provided erosion control designs to protect the levee from current scouring, wave impacts, and human foot traffic. EXTRAN model was used to predict the water level in the impoundment and the current speed at the proposed emergency spillway.

Task Manager; LSJR TMDL Modeling Review, First Coast Manufacturer's Association (FCMA)—Served as a technical advisor on behalf of FCMA to review the modeling effort by U.S. Army Corps of Engineers (USACE) Waterways Experiment Station and SJRWMD for the LSJR TMDL development. Compiled and evaluated the existing hydraulic, hydrologic, and water quality data to identi-



fy any potential short fall of the database. Reviewed the EFDC model grid configuration, tidal boundary conditions, upstream flow conditions, meteorologic inputs, and evaluated the results of hydrodynamic calibration. Provided technical recommendations to the modeling approaches.

Project Manager; East Indian River County Stormwater Management Modeling, Calpine Eastern—Developed a comprehensive stormwater management model for a 50,000-acre watershed in Indian River Farms Water Control District with extensive irrigation and drainage canal system. Visual-SWMM model was used to simulate 1,080 nodes, 312 natural channels, 787 culverts, 34 detention ponds, and 14 flow control structures. A graphical users interface and GIS database was developed for the model. Data collected at six rain gauges, five water level recorders, and three USGS gauging stations were used to calibrate the model. The modeling task is to assist Indian River County in achieving the pollutant load reduction goal.

TASK MANAGER—WATER QUALITY; MODELING

1. **Name and Title:** Jing-Yea (Paul) Yang, Ph.D., P.E.
2. **Job Assignment for Other Projects:** Dr. Yang brings to the project team a wealth of experience in hydrologic and hydraulic analyses, stormwater management, mathematical modeling, non-point source pollution and watershed studies, statistical analysis of Everglades BMP program, detention BMP and compliance, modeling surface water and groundwater systems, hydraulic modeling of reversal river flows, sediment transport/scour modeling, regional water quality assessment, reservoir system analysis, multiple-purpose water resources development, water resources management policies, modeling for flood insurance studies, GIS/visualization and environmental impact studies.
3. **How Many Years with This Firm:** Dr. Yang has been with ECT for less than 1 year.
4. **How Many Years with Other Firms:** Dr. Yang has 36 years experience working for other firms.
5. **Experience:** Dr. Yang is the water resources program manager for ECT. Dr. Yang has completed numerous projects in water resource engineering, ranging in value up to several million dollars. Dr. Yang has led national and international project teams, and has served as a corporate technical mentor in modeling and effective team building. He has authored over 120 technical publications and papers.
6. **Education:** Ph.D., Environmental Engineering
M.S., Civil Engineering
B.S., Civil Engineering



7. **Active Registration:** Professional Engineer, Florida and Illinois; FDEP Certified Stormwater Erosion and Sedimentation Control Inspector.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager for modeling services, Dr. Yang's main role will be providing technical leadership in surface water and groundwater modeling tasks. He will also support the project team with water quality and TMDL and site-specific alternative criteria (SSAC)-related consulting services as needed.

Examples of Dr. Yang's relevant project experience include the following:

Lead Hydraulic Engineer; Caloosahatchee River C-43 Design, (Berry Groves), SFWMD—Evaluated and compared the SR-80 bridge bed elevation and the water levels in Townsend Canal at the intersection in Hendry County from 100-year, 500-year and PMP storm events. Performed hydrologic and hydraulic analyses using three-dimensional surface water and groundwater model, MIKE SHE/MIKE 11/ECO Lab, to determine the effects of the project on discharges to the local canals and Caloosahatchee Estuary, groundwater levels, and water quality. Impoundment volumes and pumping rates were evaluated to optimize water storage and release benefits with flexibility to adjust to changing conditions. Conducted wind setup and wave run-up analyses to determine the elevation of the top of embankment using USACE's STWAVE/ACES and spreadsheet models. Signed and sealed the final 100 percent design report for hydrology and hydraulics (H&H) of spillway design for the stormwater reservoir.

Principal Engineer; Catfish Creek H&H, SFWMD—Conducted H&H modeling study to assess the feasibility and impact of creating a 1,670-acre impoundment on the recently-acquired Rolling Meadows Ranch using USACE's HEC-2 model. The models were used to determine a feasible operating plan for the wetland, so that wet and dry periods are conducive to desired vegetation and seasonal habitat. The study also examined flooding along the lower reaches of Catfish Creek.

Project Manager; Statistical Analysis of Everglades Agricultural Area Farm Data, SFWMD—Managed and directed a statistical analysis of water quality and farm data to determine opportunities for further water quality improvement in Palm Beach County through source controls. Analysis was conducted to meet long-term water quality goals at the Everglades Protection Area using SAS model.

Project Manager; Development of Baseline Data for Hydrologic Modeling, SFWMD—Managed, directed, and performed quality assurance/quality control (QA/QC) on about 360 stations (115 flow stations, 150 stage stations and 95 well stations) of hydrologic data series used in support of the SFWMD's modeling, reporting, and regulatory programs. After data validation, QA/QC, and single series generation, the quality-assured data was uploaded into DBHYDRO.



Lead Water Resources Engineer; Punta Gorda Hendrickson Dam Inspections, City of Punta Gorda—Performed modeling analyses to provide a hazard potential classification for the Hendrickson Dam in the City of Punta Gorda. The dam break analysis, using the National Weather Service's FLDWAV model and freeboard analysis using USACE ACES model, were conducted to support the hazard classification followed the procedures outlined in the Bureau of Reclamation, U.S. Department of Interior. Inspected the City's only water supply reservoir, the Hendrickson Dam, which consists of 2,000 feet of earthen embankment and 500 feet of sheet pile overflow spillway. Signed and sealed the final hazard classification report including freeboard and dam break analyses. The results classified the Hendrickson Dam a low hazard structure.

Lead Water Resources Engineer; Hydraulic Independent Technical Review, Environmental Firm—Responsible for hydraulic loadings for the structural design, design basis, nonlinear incremental structural analysis, floodwall backfill scour protection, concrete swing gate, floodwall, T-wall, floodwall advanced measures, MRGO closure, hydraulic storm surge and wave review, and gate design. Independent Technical Reviews for Gulf Inter-coastal Waterway (GIWW) Sector Gate Structure (150-foot wide navigation pass supported by concrete monolith built within sheet pile-braced cofferdam founded on 24 x 24-inch hollow core pre-cast concrete piles) with prefabricated sector gates either lifted or floated into place as part of Inner Harbor Navigation Canal Surge Barrier design-build project. Project consisted of a surge barrier to protect New Orleans and adjacent areas from hurricane storm surges coming from the Gulf of Mexico and Lake Borgne. The surge barrier included concrete floodwall with navigation gates where the barrier crosses the GIWW and Bayou Bienvenue. Completed 50 work orders of review projects.

Project Manager; Stormwater Treatment Area (STA) Stream Gauging Plan (STA 1W, 2, 5 and 6), SFWMD—The Operation and Hydro Data Management Division (OHDM) of SFWMD is in charge of flow monitoring, rating development and hydro data QA/QC at over 500 structures within South Florida. Among these structures, most of the new structures are in the STAs mandated by the Everglades Forever Act, passed by the US Congress in 1997. The main purpose of the STAs is to remove pollutants such as phosphorus and nitrogen from the agricultural water before discharging them into the everglades. This study showed the framework for the processes based on stream gauging measurements collected from STA 1W, 2, 5 and 6. The basis of the validation process involved QA/QC of the measurements, based on tasks described in the District's QA/QC procedures as well as an analysis of the measurements' relationship to the existing rating where the degree of deviation of the measurement from the rating is used as an indicator for further investigation of the flow measurement.

Principal Engineer; TMDL Review, Environmental Firm—St. Johns County wished to investigate possible sources of fecal coliform which appeared in test samples collected in Durbin Creek at the Racetrack Road Bridge and at other lo-



cations along Durbin Creek and its tributary, Sampson Creek. These test samples periodically exceeded State water quality criteria for fecal coliform, and caused Durbin Creek to be listed as impaired for that pollutant.

Project Manager; Hydrological and Modeling Data QA/QC for STAs and Legally Mandated Sites, SFWMD—Managed, directed and performed QA/QC of hydrologic data series used in support of the SFWMD's modeling, reporting, and regulatory programs. Analyzed H&H systems, performed hydrologic mass balance analyses and temporal and spatial statistical analyses of hydrometeorologic data, evaluated hydrometeorologic parameter measurements, filled missing data, and resolved complex hydrometeorologic and hydraulic problems. Completed hydrometeorologic data QA/QC for the District that legally mandated sites and modeling data, including 73 stations and structures.

Project Manager; Data QA/QC for Groundwater Data, SFWMD—Managed, directed, and performed QA/QC on 105 well stations of groundwater data series used in support of the SFWMD's modeling, reporting, and regulatory programs. Evaluated groundwater level measurements, performed temporal and spatial statistical analyses of the data, verified reference elevations, filled missing data, resolved hydrogeological problems, and documented all analyses in technical reports.

Lead Water Resources Engineer; Reservoir Due Diligence Report, City of Punta Gorda—Used monthly flow mass balance to analyze water availability and the filling and withdrawals from the proposed reservoir. These hydrologic analysis results supported decision to purchase the land. Evaluated the feasibility of using a 166-acre site adjacent to the City's existing water treatment plant for construction of an off-line storage reservoir.

Lead Hydraulic Engineer; State Road 7 PD&E Study, FDOT, District 4—Directed surface and groundwater modeling for multiple corridors over a 9-square-mile area in Royal Palm Beach, Florida. Provided a complex environmental impact statement according to National Environmental Policy Act and Florida regulations.

Project Manager; Surface Water/Groundwater Study, California State Water Resources Control Board—Managed, directed, and evaluated the groundwater impacts on the water quality and beneficial uses of water in the San Francisco Bay/Delta Estuary Central Valley Basin using a three-dimensional finite element surface water and groundwater model.

Lead Hydraulic Engineer; Flood Insurance Study, Federal Emergency Management Agency—Performed flood insurance studies to prepare Flood Insurance Rate Maps for Town of Cedar Lake, City of Waukegan and Village of Winthrop Harbor in Lake County; Village of Hoffman Estates, Village of Inverness, and



City of Countryside in Cook County, Illinois; as well as Town of Schneider in Lake County, Indiana.

Lead Hydraulic Engineer; Degradation Study, Iowa Public Services Company—Performed Missouri River bed level degradation study for power plant intake design at George Neal Station, Unit No. 4. USACE's HEC-6 model was used to simulate the scour of riverbed and sediment transport for determining the elevation of the intake structure.

Project Manager; River Basin Model Development; Bureau of Reclamation Southwest Region, Department of Interior—Managed, directed, and led the development and application of a rainfall/runoff model to examine the apparent decline of stream flow in the 26,000-square-mile watershed of the Cimarron and North Canadian Rivers in Oklahoma, Texas, New Mexico, and Kansas.

TASK MANAGER—EXPERT WITNESS SERVICES

1. **Name and Title:** Brad Pekas, P.G., P.E., Principal, Geosciences
2. **Job Assignment for Other Projects:** Mr. Pekas has extensive experience in Florida working on geology, hydrogeology and geophysics related consulting projects that are relevant to the services proposed to be provided by the ECT project team under this contract. He has been qualified as an expert witness in Federal (District) Court, State (Circuit Court) and Administrative Hearings.
3. **How Many Years with This Firm:** Mr. Pekas has been with ECT for 22 years.
4. **How Many Years with Other Firms:** Mr. Pekas was employed by other firms for a total of 3 years.
5. **Experience:** Mr. Pekas' qualifications as an expert witness have included the technical areas of geology, hydrogeology, hydrology, and groundwater modeling as related to water resource engineering projects. Mr. Pekas has served as a project director, project manager, and senior advisor on many water resource modeling and engineering projects, and currently serves as project manager to SWFWMD for providing technical staffing to the District. His projects have ranged in size from a few thousand dollars to over \$4 million.
6. **Education:** M.S., Geological Engineering
B.S., Geological Engineering
7. **Active Registration:** Professional Engineer, Florida, Georgia, Kansas, Louisiana, Maryland, Michigan, South Carolina, and Virginia; Professional Geologist, Florida, Georgia, and Kansas.



8. **Other Experience and Qualifications Relevant to this Project:** Mr. Pekas' main function as task manager will be to coordinate the delivery of ECT's expert witness services as required to support the project team, by ensuring the appropriate personnel are made available to meet the client's needs.

Examples of Mr. Pekas' relevant project experience include the following:

Project Hydrogeologist; Water Use Permitting for 800-MW Coal-Fired Power Plant in Florida for Joint Participants JEA, Florida Municipal Power Agency, Reedy Creek Improvement District, and City of Tallahassee; Sargent & Lundy—Responsible for modeling and impact assessment of groundwater well withdrawals for water supply for new coal-fired power plant in Taylor County, Florida.

Project Hydrogeologist; Currie Ranch Borrow Pit Water Use Permit, Currie Ranch Limited Partnership—ECT was authorized to prepare a water use permit application and develop a supporting conceptual groundwater flow model for the development of a sand borrow pit located in south central Sarasota County, Florida. The groundwater model (MODFLOW) was used to determine potential groundwater drawdowns associated with dewatering the mine pit, and evaluate several rim ditch recharge scenarios to mitigate withdrawal impacts.

Project Hydrogeologist; Site Certification Application (SCA) for New Smyrna Beach Facility, Duke Energy Services—Responsible for developing a regional groundwater flow model to evaluate the potential impacts to existing groundwater resources resulting from the proposed process withdrawals (1.2 to 1.8 MGD) with an emphasis on drawdown and saltwater intrusion impacts. The evaluation included preparing a multilayer (three-dimensional) groundwater flow model to evaluate potential impacts from groundwater withdrawals in Volusia County, Florida. In addition to the numerical modeling efforts, additional analytical methods were used to determine the potential for saltwater upconing and intrusion. The analytical methods utilized included: upconing in a semi-confined aquifer, drawdown in coupled aquifer systems, salt water intrusion, and Gyben-Herzberg relationship. The results of the groundwater withdrawal and saltwater intrusion impact evaluation were incorporated into the SCA package, consumptive use permit application forms, and a separate detailed report included as a SCA appendix.

Project Hydrogeologist; SCA for Leesburg Power Station, Panda Energy—Responsible for evaluating the groundwater resources and geological/geotechnical suitability of a power plant siting and licensing study in Lake County, Florida. The plant is proposed with a nominal net 1,000 MW capacity. Responsible for collection, research, and evaluation of all pertinent data related to the preparation of hydrogeologic sections of a SCA. The evaluation included preparing a mass balance, hydraulic loading model to evaluate potential groundwater quality impacts resulting from sprayfield application of various power plant cycl-



ing/blowdown water quality scenarios. The results of the groundwater quality impact evaluation were incorporated into the SCA package.

TASK MANAGER—WETLANDS AND ECOLOGY SERVICES

1. **Name and Title:** Lisa Ricker, PWS, Staff Scientist
2. **Job Assignment for Other Projects:** Ms. Ricker is a senior ecologist and project manager with ECT. She has extensive experience conducting ecological surveys and assessments including wetland delineations, wetland functional assessments using the Uniform Mitigation Assessment Method (UMAM), plant and wildlife threatened and endangered species surveys, vegetation and land-use mapping, and vegetation and wildlife inventories. In addition, Ms. Ricker is highly experienced in preparing ERP applications, including conducting alternatives analyses, finding creative methods for eliminating and reducing impacts, preparing mitigation plans, and coordinating with federal and state regulatory agencies to secure permits. Ms. Ricker is also experienced in providing environmental monitoring during construction to ensure projects are built according to plan and within permit conditions. She has additionally testified as an expert witness in ecological issues for several complex permitting projects.
3. **How Many Years with This Firm:** Ms. Ricker has been with ECT for 8 years.
4. **How Many Years with Other Firms:** Ms. Ricker has been employed by other firms for a total of 7 years.
5. **Experience:** Ms. Ricker's has served as project manager and project scientist on many ecology and wetlands delineation/permitting projects. Her projects have ranged in size from a few thousand dollars to several million dollars.
6. **Education:** M.S., Biology
B.S., Zoology
7. **Active Registration:** Professional Wetland Scientist; Maryland Qualified Environmental Professional.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Ms. Ricker will be responsible for coordination of permitting and overall quality management for all ecology services provided by the ECT team under this contract.

Examples of Ms. Ricker's relevant project experience include the following:

Project Manager; SeaCoast Natural Gas Pipeline Project; EMS Land and Environmental Services—Performed wetland delineations, threatened and en-



dangered species surveys, and natural resource inventories for a 50-mile long natural gas pipeline. Prepared USACE and ERP applications for impacts associated with the pipeline project, including crossing the St. Johns River. Prepared alternatives analysis and supporting documentation for crossing state conservation lands.

Ecological Task Manager; Keystone Jacksonville Terminal, Southern Monitoring & Environmental, LLC—Performed wetland delineations, threatened and endangered species survey, and wildlife assessments. Assisted in preparation of impact analysis in support of ERP/USACE permit application preparation for Port dredge project in Jacksonville, Florida. Scope will include acquisition of sovereign submerged lands easement.

Ecological Task Manager; CSX Terminal; Constellation Energy—Assisted in preparation of a Maryland Department of the Environment and USACE permit applications for 50+ foot depth dredge project in Port of Baltimore, Maryland. Scope included baseline and impact assessment for ecological impacts and alternatives analysis.

Assistant Project Manager; Elk City Wind Energy Facility; NextEra Energy Resources, LLC—Performed a critical issues analysis for a +90,000-acre wind resource area in western Oklahoma. Critical issues evaluated included threatened and endangered bird species, native potential bird and bat fatalities from collision with tall structures, loss or fragmentation of habitat, wetland impacts, visual impacts, impacts to cultural resources, and land use/zoning issues.

Ecologist; Mosaic Ona Mine Permitting Project; Mosaic Fertilizer, L.L.C.—Performed wetland functional assessment, using UMAM for 17,000+ acres of land proposed for surface phosphate mining in the Hardee County, Florida. The assessments entailed qualitatively and quantitatively characterizing location and landscape support, water environment, and community structure of each wetland in reference to high quality wetlands of the same type. The project required significant internal and agency coordination to ensure consistency among ecologists and reviewers.

TASK MANAGER—TMDL TECHNICAL SUPPORT

1. **Name and Title:** Sanjiv K. Sinha, Ph.D., P.E.
2. **Job Assignment for Other Projects:** Work assignments include project director, project manager, engineer of record, chief engineer, and program director for a wide range of water resource-related projects from Florida to Michigan.
3. **How Many Years with This Firm:** Dr. Sinha has been with ECT for 10 years.



4. **How Many Years with Other Firms:** Dr. Sinha has been employed by other firms for a total of 10 years.
5. **Experience:** Dr. Sinha's project experience includes a wide variety of projects in the areas of hydraulics and hydrology, flow modeling and data collection, stream and lake restoration, floodplain studies, stormwater management, watershed modeling and pollutant loading analysis, fisheries management, and sustainable water resources.
6. **Education:** Ph.D., Civil and Environmental Engineering
M.S., Civil and Mineral Engineering
B.S., Civil Engineering
7. **Active Registration:** Professional Engineer, Michigan.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Dr. Sinha will be responsible for any TMDL support needed by the Leon County. Dr. Sinha is currently program director for ECT's share of a multi-million dollar EPA contract for TMDLs in Michigan.

Examples of Dr. Sinha's relevant project experience include the following:

Program Director, Developing Biota TMDLs, EPA/RTI International Inc.— This project supports the development of biota TMDLs for five 303(d) listed water bodies in the State of Michigan—Bishop Creek, Blakely Drain/Marsh Creek, Brownstone Creek, Frank and Poet Drain, and Tonquish Creek. In conjunction with Michigan Department of Natural Resources and Environment (MDNRE), flow and total suspended solids (TSS) monitoring is being conducted at 16 locations. These locations are being monitored three times during dry weather base flow conditions, and four times during wet weather conditions. Monitoring results will be analyzed and used to finalize the TMDLs.

Project Chief Engineer; Great Lakes Fishery and Ecosystem Restoration Support Plan, Great Lakes Commission/USACE— This project targeted developing a strategic initiative (similar to the Everglades Restoration Plan although on a much smaller scale) to restore the fisheries and ecosystem within the Great Lakes region. The project consisted of identifying potential data gaps in the Great Lakes region, developing state-of-the-art review reports on Great Lakes Fishery, and addressing the problems that have led to significant declines in the populations of specific species. Overall, the project developed a strategic plan with an outline of the complexities of strategic fishery management, including policy, planning, coordination, and restoration. Based upon the recommendation of this work, the USACE has been authorized to spend \$100 million in federal funding over the next 10 years.



Project Director; Lake St. Clair Implementation Prioritization Project, Macomb County Health Department and U.S. Environmental Protection Agency (EPA)-Great Lakes National Program Office (GLNPO)—This project targets developing a filtering matrix and a scientific survey for stakeholders, coordinating survey responses, data analyses, and facilitating multiple meetings to prioritize more than 110 recommendations of Lake St. Clair Management Plan.

Project Director, Developing Restoration Plans and Delisting Targets for Areas of Concern (AOCs) Across the Great Lakes, EPA-GLNPO/Industrial Economics Inc.—This project developed criteria to de-list eight Beneficial Use Impairments for the Clinton River Watershed, which is a Southeast Michigan watershed that is currently listed as an AOC and is a key tributary to the Great Lakes. This project is unique in that it spearheads potential efforts to de-list 41 remaining AOC within the Great Lakes System.

Task Manager; Stony/Paint Subwatersheds Management Plan, MDNRE—Provided technical oversight and advice related to hydrology/hydraulics modeling for the development of a comprehensive watershed management plan for the Stony/Paint subwatersheds in Southeast Michigan. The plan included review and evaluation of beneficial/designated uses and locally driven desired uses, source identification and determination of cause/effect relationships for contaminants, determination of allowable loadings, establishment of necessary corrective actions/plans, local commitment to corrective action/plan implementation, and establishment of an evaluation program including monitoring strategies for future trends.

Project Director; Planning for a Center for Watershed Education, Cranbrook Institute of Science/Americana Foundation—This project focused on developing a strategic planning document that outlined the development of a proposed Center for Watershed Education in Southeast Michigan. The Center will provide educational experiences and resources for learning about regional and global watersheds, as well as the issues associated with water quality and its management. The Center's programs will not only emphasize technical issues but also the social and political constraints that are connected to water quality issues within the Great Lakes region.

Task Manager; Lake St. Clair Watershed Comprehensive Management Planning, Great Lakes Commission and USACE—Carried out watershed modeling that led to source identification and determination of cause/effect relationships for contaminants, determination of allowable loadings, and establishment of necessary corrective actions/plans via BMP analyses. Provided technical oversight and advice related to water quality assessment. Helped review and evaluate beneficial/designated uses and locally driven desired uses. The project also included means to develop local commitment to corrective action/plan implementation, as well as the establishment of an evaluation program including monitoring strategies for future trends.



Task Manager; Clinton-Main Subwatershed Management Plan, MDNRE— Provided technical oversight and advice related to hydrology/hydraulics modeling for the development of a comprehensive watershed management plan for the Clinton Main subwatershed in Southeast Michigan. The plan included review and evaluation of beneficial/designated uses and locally driven desired uses, source identification and determination of cause/effect relationships for contaminants, determination of allowable loadings, establishment of necessary corrective actions/plans, local commitment to corrective action/plan implementation, and establishment of an evaluation program including monitoring strategies for future trends.

Task Manager; Anchor Bay Watershed Planning and Management, St. Clair County/MDNRE— Provided technical oversight and advice related to hydrology/hydraulics modeling for the development of a comprehensive watershed management plan for the Anchor Bay in Southeast Michigan. The plan included review and evaluation of beneficial/designated uses and locally driven desired uses, source identification and determination of cause/effect relationships for contaminants, determination of allowable loadings to Anchor Bay, establishment of necessary corrective actions/plans, local commitment to corrective action/plan implementation, and establishment of an evaluation program including monitoring strategies for future trends.

Project Director; Phase II Permit Application and Stormwater Management Plan, Ann Arbor Public Schools— Helped draft the Stormwater Management Plan as a part of the final NPDES Phase II permit application on behalf of Ann Arbor Public School District. Helped develop NPDES discharge and pretreatment permits for roughly two dozen school facilities. Highly rated product by the MDNRE, this product is likely to be used as an example for nearly 450 school districts across the State of Michigan.

TASK MANAGER—FIELD SERVICES

1. **Name and Title:** Lealy S. Norris
2. **Job Assignment for Other Projects:** Mr. Norris has worked as a project manager, task manager, project scientist, and crew chief on a variety of projects where ecological and field services have been required.
3. **How Many Years with This Firm:** Mr. Norris has been with ECT for 6 years.
4. **How Many Years with Other Firms:** Mr. Norris has been employed by other firms for a total of 22 years.



5. **Experience:** Mr. Norris' project experience includes field sampling activities, equipment operation and maintenance, ESAs, wetland delineations, protected species surveys, GPS mapping, aquatic plant removal, and science diver.
6. **Education:** High school diploma.
7. **Active Registration:** Advanced SCUBA; Florida certified burner, No. 02957; FDEP wetlands delineation; FDEP advanced hydric soils; FDEP stormwater management inspector certification.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Mr. Norris will be responsible for all field services required for tasks assigned under this project.

Examples of Mr. Norris' relevant project experience include the following:

Project Manager; Florida Wildlife Exotic Plant Survey, Florida Fish and Wildlife Commission—Conducted field surveys of two wildlife management areas in Taylor County, Florida, to identify and map exotic plant occurrences.

Task Manager; Invasive/Exotic Plant Survey, Leon County—Conducted field survey on 215 acres. Prepared results report along with technical specification on management of species documented during survey.

Task Manager; Field Services for Taylor Energy Center Project Power Plant and Transmission Siting for Florida Municipal Power Authority, Sargent & Lundy—Responsible for field sampling of soil and water. Also assisted in wetlands evaluation and ecological studies for a proposed power plant site in Taylor County, Florida.

Assistant Project Manager; Tillie Miller Park, City of Carrabelle—Worked closely with City officials and public in the design and renovation to local recreation park. Coordinated with engineers and contractors on all areas related to construction. Prepared bid packages.

Project Scientist; Environmental Services, Leon County—Conducted ecology, wetlands, and other environmental tasks.

Crew Chief; Wetlands Delineation and Mapping—Supervised crews conducting wetlands delineation and mapping on many Florida panhandles sites.

Crew Chief; State, County, and Local Survey Firms—Team leader on boundaries, topographic, tree, and plant identification work.

Project Manager; Wetlands Management, SGI Land Company, LLC—Worked with client to negotiate with the City of Carrabelle on best management



of wetlands located on property proposed for future urban housing project. Worked with client's engineering firm to develop native landscaping plan for subject property. Liaison between City and client in permitting issues.

Assistant Project Manager; Carrabelle Wharf, City of Carrabelle—Attend all public and government meetings to help in the design of a new riverfront recreation area of the City of Carrabelle, Florida. Conduct and coordinate all field sampling. Prepare necessary permit applications and bid packages. Provide construction oversight, as needed.

Project Scientist; Environmental Services, City of Tallahassee—Conducted wetland delineations, Phase I/II environmental site assessments, water quality monitoring, and other environmental tasks.

Assistant Project Manager; Field Studies, City of Carrabelle—Design and construction of a city park and marina. Project included surveying, public meetings, water and sediment sampling, and a tidal current study.

Park Ranger; FDEP—Park guide on Wakulla River for over 6 years. Led many guided hike and boat tours in and along the Wakulla River. Lead ranger on many resource management projects to include prescribed fire and exotic plant removal.

TASK MANAGER—GIS/CADD

1. **Name and Title:** Maria Cruz
2. **Job Assignment for Other Projects:** Work assignments have included GIS specialist, web mapping developer, database developer, computer programmer, and manager of the GIS/CAD department.
3. **How Many Years with This Firm:** Ms. Cruz has been with ECT for 12 years.
4. **How Many Years with Other Firms:** Ms. Cruz has been employed by other firms for a total of 13 years.
5. **Experience:** Ms. Cruz's project experience includes GPS/GIS inventory and management, and 15 years of web and database design and development. She is experienced in developing GIS databases to analyze and perform tasks, such as: raster analysis, phase I site studies, thematic mapping (such as land use, soils, zoning, etc), parcel mapping, wetlands mapping, and land use planning, among others. Ms. Cruz has also developed multiple web mapping applications for the company, incorporating the new Google Map technology, providing the client with the user experience of a Google map.
6. **Education:** B.S., Business Administration/CIS



7. **Active Registration:** MCP NT 4.0 certification, No. 2073467; Security+™ Certified Professional

8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Ms. Cruz will be responsible for coordination and overall quality management for all GIS and CADD services provided by ECT and its subcontractors

Examples of Ms. Cruz's relevant project experience include the following:

Web Mapping Developer; Website Development, SWFWMD—Developed a web-based demo site for SWFWMD (www.ectmapping.com) to display watershed and floodplain data. The application displays imagery, roadways, FEMA, and parcel information for Pasco County. The application provides a search function to locate and display parcel information by first and/or last name. The website can be accessed and viewed by the general public.

GIS Specialist; Kemper Lignite Mine and Transmission lines, Southern Company Services, Inc.—Managed and prepared various GIS and CAD maps for multiple corridors for Mississippi Power's proposed gas transmission pipeline and electrical transmission lines in Kemper, Lauderdale, Jasper, and Clarke Counties, Mississippi. Generated data set to determine and analyze impacted and non-impacted wetlands, upland forests, land use, construction impacts, and length of collocated facilities.

GIS Specialist; SeaCoast Natural Gas Transmission Pipeline, TECO Peoples Gas—Prepared various GIS maps for multiple corridors for TECO Peoples Gas proposed gas transmission pipeline in Clay, Duval, and St. Johns Counties, Florida. Generated data sets, from GPS data, and used for analysis of the following: impact on wetlands, parcel proximity, collocated facilities, and structure counts.

Web Mapping Developer; Florida Power & Light Company (FPL)—Developed a web mapping application, with embedded Google maps, to locate and display distance measurements from a specified address (or click on the map) to the routes proposed for over 100 miles of new transmission lines denoted on the map. The software used was Google Maps API, JavaScript and HTML/CSS. This web site was developed specifically for FPL for their Turkey Point Nuclear Project and is publicly accessible. (www.ectincmap.com/FLviewerT.html).

GIS Specialist; Florida Municipal Power Authority, Sargent and Lundy—Created several general location and operational maps for site analysis. Collected data and prepared land/vegetation, wetlands and potential construction impacts maps.

GIS Specialist; St. Johns Pellicer-Pringle 230-kV Transmission Corridor, FPL—Prepared maps, integrated data from several sources, and manipulated pho-



topographic and satellite imagery with ArcGIS 9.x, AutoCAD Map, and Raster Design. Collected data and prepared maps for land/vegetation, construction impacts, wetlands and other geographic features. Performed spatial proximity analysis to score best suitable corridor based upon proximity of specific features. Prepared series of maps for licensing applications, and map boards for public hearings.

GIS Specialist; Site Analysis and Licensing for Taylor Energy Center, Sargent & Lundy—Delineated over 900 acres of wetlands from GPS points collected from the field, and integrated with other GIS data. Collected, calculated and mapped data for land/vegetation, construction impacts, wetlands and other geographic features.

Web Mapping Developer; Confidential Client—Deployed web-based GIS mapping application for ECT marketing team, with the potential of identifying and tracking potential projects and efforts in Florida. Duties entailed developing the web application to serve and display graphic and database attribute information for ECT authorized staff. Web mapping software used is UNM's Mapserver. Programming languages include HTML/CSS, CGI, Javascript and PHP. Current efforts entail re-writing the web application with PHP, under Mapserver/Mapscript for advanced mapping functionality.

Access/VBA Database Programmer—Developed a linear corridor assessment model in PC-based MS Access/VBA (called Segment Manager and Analyzer [SMA]) for in-house evaluation of large numbers of route alternatives for power clients. This proprietary program identifies all route permutations, calculates all route total scores for the criteria evaluated, allows for weighting of the criteria, and ranks the routes based on weighted criteria.

GIS Specialist; Site Study, Edison Mission Energy—Assembled numerous GIS maps to identify initial potential sites based on regional reviews across the state of Illinois (preliminary transmission flow modeling, review of sequestration potential, and review of operating and proposed mines); then narrowed the field down for further detailed evaluation.

GIS Specialist; Numerous Clients—Collected data, such as 2004 digital ortho quarter quads, USGS quad maps, National Wetland Inventory, Florida Geographic Data Library, and GPS survey information to generate cartographic maps. Converted AutoCAD data to GIS format for analytical use. Generated thematic maps and general location maps for use in proposals, presentations, public hearings, etc.

GIS/AutoCAD Specialist; Kelson Ridge Power Plant, Reliant Energy—Prepared aerial maps and other documentation for land use, wetlands, soils, floodplains, and other areas necessary for the certificate of public convenience and necessity studies associated with the proposed 1,650-MW facility located in Charles County, Maryland. Worked with state and county agencies to obtain land use and environmental data.



SW-A.3. Outside Consultants Anticipated to be Used on this Project

ECT anticipates a potential need for subconsultants on this project and has identified the following companies to provide services:

Geotechnical investigations, testing and consulting

Environmental & Geotechnical Specialists, Inc. (WBE)
3154 Eliza Road
Tallahassee, Florida 32308

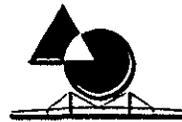


Surveying

Thurman Roddenberry & Associates, Inc.
125 Sheldon Street
Sopchoppy, Florida 32358

Structural engineering

Garcia Bridge Engineers, P.A. (MBE)
1018 Thomasville Road Suite 105A
Tallahassee, FL 32303



Landscape architecture, certified arborist services, display graphics

Cowles Landscape Architecture
2285 Trescott Drive
Tallahassee, FL 32308



Facility planning and capital project finance consulting

Angie Brewer & Associates, L.C. (WBE)
2285 Trescott Drive
Tallahassee, FL 32308



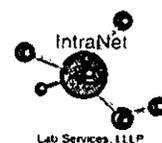
Archaeology support

Archaeological Consultants, Inc. (WBE)
98 Hickory Wood Drive
Crawfordville, FL 32327



Laboratory analytical services

IntraNet Lab Services, LLLP (WBE)
3838 Killlearn Center Court
Tallahassee, Florida 32308





*Stormwater Engineering
Leon County Request for Proposals No. BC-03-17-11-25*

Several of the above firms are either MBE or WBE certified by Leon County, the City of Tallahassee, or the State of Florida. Although there is no aspirational MBE/WBE target prescribed by Leon County for this project, ECT acknowledges that each respondent is strongly encouraged to secure MBE and WBE participation through the purchase of those goods or services when opportunities are available.

Additional or alternate outside consultant firms may be used for this project, subject to approval by Leon County.



SW-B. EXPERIENCE WITH PROJECTS OF A SIMILAR TYPE AND SIZE

SW-B.1. Projects Illustrating Experience of Firm and Staff

In this section, ECT presents ten projects, completed within the past 5 years, which illustrate relevant experience of the firm and current staff which are to be assigned to the project.

PROJECT NO. 1—CR-30A DRAINAGE IMPROVEMENTS FOR THE CITY OF CARRABELLE

HIGHLIGHTS:

- | | |
|---|---|
| ■ <i>Engineering planning, design and permitting</i> | ■ <i>Coastal hazard hardening of water and sewer infrastructure</i> |
| ■ <i>Continuity of utility service through project area</i> | ■ <i>Grant assistance</i> |
| ■ <i>Channel stabilization and sediment control</i> | ■ <i>Bid and construction phase services</i> |
| ■ <i>Invasive species mapping and eradication</i> | |

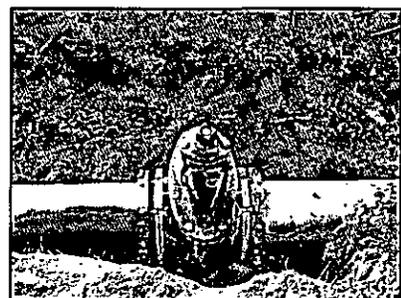
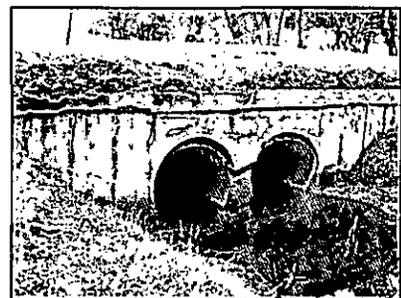
A 622-acre partially urbanized watershed within the City of Carrabelle discharges to St. George Sound, which lies within the Apalachicola National Estuarine Reserve. Within this watershed, the City has experienced chronic erosion and sedimentation problems, resulting in formation of a large sediment delta in St. George Sound. Additionally, over time erosion has contributed to channel destabilization and failing drainage infrastructure associated with a double 60-inch corrugated metal cross-drain under Gulf Avenue (CR-30A). Under its continuing

services agreement with the City of Carrabelle, ECT was retained to provide engineering design, permitting, bidding assistance, construction administration and environmental consulting services to assist the City in developing and implementing solutions to these problems.

ECT assisted the City of Carrabelle with the preparation of a successful application for a construction grant under the Florida Forever competitive grant program administered by the

Northwest Florida Water Management District. After the grant funding was secured, ECT provided design, permitting, and construction phase services for the following improvements:

- Replacement of a failing double 60-inch corrugated metal cross-drain system under CR-30A with a new headwall, endwall and sheetpile system, new 60-inch reinforced concrete cross-drain pipes and armoring enhancements.
- Strengthening critical infrastructure against coastal storm hazards by replacing existing PVC sanitary sewer forcemain, vacuum sewer, and water main pipes in the project area with ductile iron pipe.





- Drainage channel stabilization and armoring, creation of a quiescent pool for sediment removal upstream from the cross-drains, and provision of a stabilized equipment access driveway for periodic maintenance sediment removal by the City.
- Removal and treatment of invasive plants (giant reed—*Arundo donax*) located south of the CR-30A cross-drain followed by re-vegetation with native species.

ADDITIONAL INFORMATION:

LOCATION:	<i>Carrabelle, Florida</i>
CLIENT:	<i>City of Carrabelle</i>
ADDRESS:	<i>1001 Gray Avenue Carrabelle, Florida 32322 Courtney Dempsey, City Administrator, 850 • 697-2727</i>
CONTRACT PERIOD:	<i>April 2008—February 2011</i>
CONTRACT AMOUNT:	<i>\$222,792 (Construction)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Leland A. Smith, P.E.—Project Manager/Engineer of Record</i>
■ <i>David Sanders—Construction Phase Services</i>
■ <i>Lee S. Norris—Environmental Scientist</i>
■ <i>Michael A. Racca—CADD/GIS</i>

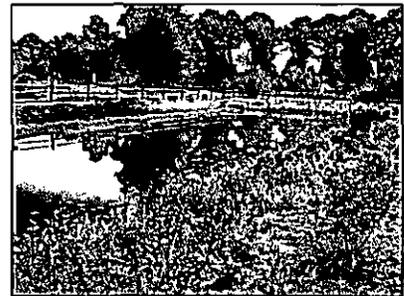


PROJECT NO. 2—AVENUE C DRAINAGE IMPROVEMENTS FOR THE CITY OF CARRABELLE

HIGHLIGHTS:

- Engineering planning, design and permitting
- Replaced dry detention with wet detention
- Bid and construction phase services
- Sediment control
- Localized flooding relief
- 27.5-acre urbanized treatment area
- Grant assistance
- Ecological services

The City of Carrabelle experienced chronic problems with sediment buildup leading to obstruction of a cross-drain under Avenue C, and associated localized flooding problems in a fully developed urban watershed. The problem was made worse by the fact that the cross-drain was located within FEMA's designated 100-year floodplain. Under its continuing services agreement with the City of Carrabelle, ECT was retained to provide engineering design, permitting, bidding assistance, construction administration and environmental consulting services to assist the City in developing and implementing a stormwater retrofit project to address this problem.



ECT assisted the City of Carrabelle with the preparation of a successful application for a construction grant under the Florida Forever competitive grant program administered by the NFWFMD. After the grant funding was secured, ECT provided design, permitting, and construction phase services for the following improvements:



- Retrofit of the existing, partially obstructed Avenue C cross-drain to inhibit sediment transport, and provision of a sediment/floatables trap to protect against future obstruction.
- Construction of a new wet detention stormwater management facility immediately south of the Avenue C cross-drain, addressing localized flooding by adding storage volume to the watershed, and treating stormwater runoff from a previously untreated 27.5-acre urban watershed.





ADDITIONAL INFORMATION:

LOCATION:	<i>Carrabelle, Florida</i>
CLIENT:	<i>City of Carrabelle</i>
ADDRESS:	<i>1001 Gray Avenue Carrabelle, Florida 32322 Courtney Dempsey, City Administrator, 850 • 697-2727</i>
CONTRACT PERIOD:	<i>April 2008—August 2010</i>
CONTRACT AMOUNT:	<i>\$158,062 (Construction contract)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Leland A. Smith, P.E.—Project Manager/Engineer of Record</i>
■ <i>David Sanders—Construction Phase Services</i>
■ <i>Lee S. Norris—Environmental Scientist</i>
■ <i>Michael A. Racca—CADD/GIS</i>

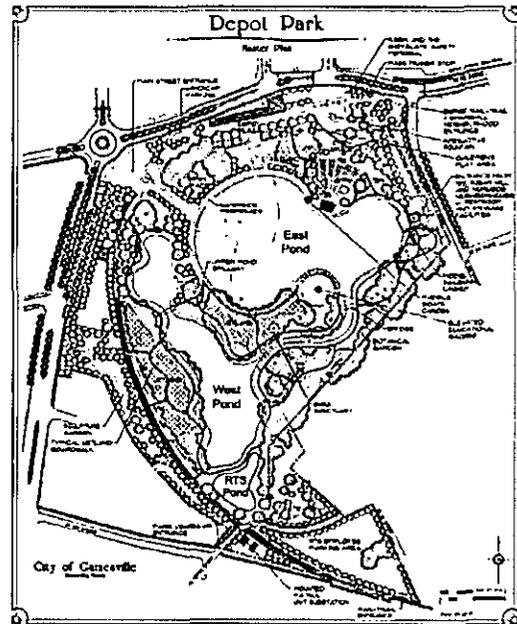


PROJECT NO. 3—GAINESVILLE DEPOT PARK BROWNFIELD REMEDiation AND STORMWATER ENGINEERING CONSULTING SERVICES

HIGHLIGHTS:

- Phase I environmental site assessment
- Planning and permitting
- Special environmental studies
- Attend meetings representing the city
- Contaminated soil/sediment assessment
- Stormwater design engineering
- Park design and construction
- Remedial action plan
- Wetlands delineation and mitigation
- Threatened/endangered and listed species surveys
- Coordinate with environmental agencies for the city
- Remediation of contaminated soil and sediment

The City of Gainesville was awarded a Regional Brownfield Pilot project grant in 1996 by EPA, Region 4. The brownfield site, located in the vicinity of Depot Avenue in downtown Gainesville, consisted of a 32-acre tract of land with several landowners and several former sources of contamination (gas stations, cement plant, other industrial operations, petroleum tank farms, manufactured gas plant [MGP], and potentially others). The primary contamination source at the site was coal tar residues from the former MGP. ECT was awarded a contract to characterize the complex site, identify the various sources of contamination and extent of soil and groundwater contamination, and prepare a remedial action plan (RAP) to remediate the site. In addition, the city wanted ponds designed for the site to capture and treat stormwater from an 89-acre area in downtown Gainesville. When all remediation is completed, the city also plans to convert the area into a park site with landscaping, cycling, walking, and jogging trails; a museum in the old train depot building; and other amenities. Due to the complexity of the site, including the funding sources, ECT has completed many tasks at the site since 1996. These tasks include the following.



Artist's concept of park after remediation and restoration

Under Task 1, ECT completed a Phase I ESA of the site in addition to completing all of the required studies necessary for obtaining an environmental resource permit. These studies included wetland delineations, rare and threatened species surveys, tree surveys, archaeology surveys, etc. \$48,281

Under Task 2, ECT installed monitoring wells, collected soil and water samples, and completed contamination assessments and risk assessments to determine the extent of contamination and define soil cleanup target levels (SCTLs) for this very complex site. Task 2 was completed in 2005 at a cost of \$942,276.



Under Task 3, an engineering feasibility study and an alternatives analysis were completed and submitted. ECT presented reports of all of the work items during several public hearings and meetings with various stakeholders. Task 3 was completed for a cost of \$236,984.

Under Task 4, a preliminary RAP was prepared and submitted. The remedial action was selected by the city, Alachua County environmental agency, and the FDEP, with participation by ECT. The total cost for Task 4 was \$134,343.

RAPs were also prepared for separate phases of the project. Under Task 5, the cost to complete was \$254,838.

Under Task 6, remediation, the first phase consisted of excavation and remediation of soils and contaminated groundwater associated with the Akira Wood site. Coal tar impacted soils (1,914 tons) were removed and transported to an approved landfill. Contaminated groundwater (188,000 gallons) was disposed of in the city's wastewater treatment plant (WWTP). During the next phase, 4,856 tons of petroleum-contaminated soils and 100,000 gallons of groundwater were removed and treated. The groundwater treatment system consisted of sand beds followed by activated carbon. During the next phase, excavation of the westernmost stormwater basin, a total of 5,700 tons of soil contaminated with petroleum and coal tar residues were transported and disposed of at an approved landfill. Over 9 million gallons of contaminated groundwater was treated onsite by sand filtration and activated carbon prior to disposal in the city's WWTP. Task 6 work was completed in 2006 for \$511,902.

Under Task 7, the RAP for the next phase was submitted to the State for approval. This plan called for the excavation of petroleum- and coal tar-contaminated soils followed by onsite thermal treatment. It was estimated that 170,000 tons of soil would need to be treated. Contaminated groundwater at the site was proposed to again be treated by sand filtration and activated carbon system. A National Pollutant Discharge Elimination System permit was prepared and obtained for discharging a portion of the treated effluent to Sweetwater Branch and subsequently to Paynes Prairie. Additional effluent was planned to be discharged to the City's WWTP. It was estimated that 30 to 40 million gallons of contaminated groundwater would require treatment. \$809,252

ECT subsequently initiated a pilot scale test to evaluate the effectiveness of the thermal treatment system. The pilot testing failed due to the extremely high BTU content of the contaminated soil. The treatment method proposed in the RFP was modified to include excavation and hauling to an approved landfill.

ECT is currently completing remediation at the Poole Roofing area and to the south of Depot Avenue. The area being remediated has been excavated to a depth of 40 feet. The remediation area is dewatered through 106 wells surrounding the area at a pumping rate of 300 gallons per minute (>432,000 gallons per day). An additional dewatering pump has also been installed to remove excess seepage from a sump constructed in the main excavation area. Water recovered from the dewatering system is processed through sand filters and activated carbon prior to discharge to Sweetwater Branch. Contaminated soils removed from the site are transported to an approved landfill for disposal. The cost of this phase, including additional remediation and lake construction to be completed south of the current site, exceeds \$17,000,000.



All work has been completed in compliance with the ECT site-specific health and safety plan and the State QA/QC guidelines. ECT also provided final engineering designs for the Depot Avenue reconstruction and construction oversight during the final remediation and restoration phases. The ultimate goal for the site is remediation, restoration, and conversion into a park that will treat stormwater and also provide a recreation hub to help revitalize the city's east side.

Water Resources

As an integral part of the site restoration, ECT is in the process of designing a regional stormwater park. ECT engineers performed a thorough inventory of downtown Gainesville to determine potential offsite areas for inclusion in the regional treatment system. Upon completion of the inventory ECT engineers developed a basin plan and model using EPA SWMM. The results of this plan demonstrated that the park would have the capacity to treat runoff from approximately 89 acres of downtown Gainesville, with runoff from 47 acres flowing to the park through the storm sewer system and runoff from the remaining 42 acres re-routed from the adjacent Sweetwater Branch Creek. The park itself will consist of a treatment train approach. The first step in the treatment train will be pretreatment provide by a 10- by 16-foot second generation baffle box. The second step in the treatment train process will be performed by two wet detention ponds in series. These wetland ponds are connected by a braided wetland stream that will provide additional water quality treatment. These ponds will be lined to prevent potential groundwater contamination from entering the ponds. Lastly, the water will flow through a preserved onsite wetland for the final step in the treatment train. \$294,362

ADDITIONAL INFORMATION:

LOCATION:	Gainesville, Florida
CLIENT:	City of Gainesville
ADDRESS:	P.O. Box 490, MS 58 Gainesville, FL 32602-0490 Mr. Stewart E. Pearson, P.E., 352 • 334-5072 Mr. John Veilleux, P.E., 352 • 393-8418
CONTRACT PERIOD:	January 2000 to Ongoing
CONTRACT AMOUNT:	\$20,000,000

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ Larry J. Danek, Ph.D.—Project Manager
■ Chris R. Fagerstrom, P.E.—Stormwater Engineer
■ James E. Poppleton—Ecological assessment
■ Gary P. Dalbec—Field Studies



PROJECT NO. 4—PROFESSIONAL SERVICES IN SUPPORT OF ENVIRONMENTAL RESOURCE PERMITTING PROGRAM FOR NWFWM D

HIGHLIGHTS:

- ERP permit application reviews
- Technical reviews of drainage
- Calculations, geotechnical reports and other supporting information
- Permit application site inspections
- Technical reviews of construction drawings
- Other services as needed

ECT is providing ERP application reviews and other services. ECT is currently in the third year of a continuing services contract with the District and is utilizing employees with relevant experience from multiple office locations throughout Florida. This contract allows ECT scientists and engineers to provide a wide variety of services to the District. Services provided to date under this contract include the following:

- Administrative reviews of permit applications to determine completeness.
- Technical reviews of construction drawings, drainage calculations and stormwater modeling reports.
- Technical reviews of wetland impacts and assessment/mitigation reports.
- Site inspections to evaluate pre-development conditions and gather site information of engineering and ecological relevance to permit reviews.



ADDITIONAL INFORMATION:

LOCATION:	All Counties within the District Boundaries
CLIENT:	Northwest Florida Water Management District
ADDRESS:	Bureau of Environmental Resource Regulation The Delaney Center, Suite 2-D 2252 Killearn Center Boulevard Tallahassee, FL 32309
CONTACT:	Lee Marchman, P.E., 850 • 921-2986
CONTRACT PERIOD:	October 2007—Ongoing
CONTRACT AMOUNT:	\$286,679 (to date)



ECT PERSONNEL ASSIGNED TO THE PROJECT:

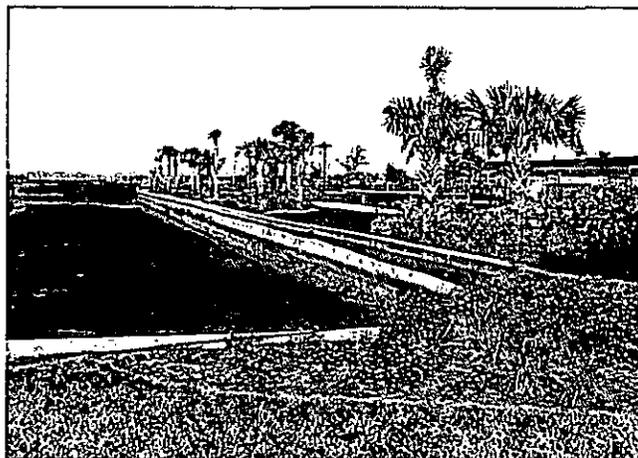
- **Ronald R. Potts, P.E., P.G.—Project Manager**
- **Larry J. Danek, Ph.D.—Project Director**
- **Lee A. Smith, P.E.—Permit Reviewer, engineering**
- **Ivan B. Chou, P.E.—Permit Reviewer, engineering**
- **Gary R. Cook—Permit Reviewer, engineering**
- **Maya R. Scohier—Permit Reviewer, wetlands**
- **Lisa D. Ricker—Permit Reviewer, wetlands**
- **Lealy S. Norris—Wetlands Field Inspections**

**PROJECT NO. 5—CITY OF NEW SMYRNA BEACH
STORMWATER FACILITIES MASTER PLAN**

HIGHLIGHTS:

- **Municipal stormwater master plan**
- **Coastal area**
- **Stormwater utility establishment**
- **Drainage basin delineations**
- **Drainage system modeling (AdICPR)**
- **Outfall inventory**
- **Level of service development**
- **Problem area identification**
- **NPDES review**
- **BMP development**
- **Cost estimating**
- **Capital Improvement Plan development**

As the first step towards establishing a stormwater utility, ECT developed the City of New Smyrna Beach Stormwater Master Plan in 1995. This project began by preparing an inventory of existing drainage system structures that was placed into a database for future GIS utilization. From this inventory, the existing drainage systems within the city were characterized. Both pipe and ditch systems were computer modeled using AdICPR software, while the capacity of small systems was evaluated using hand-calculation methods. The major systems which were modeled using the AdICPR software included the 150-acre Canal Street system with 55 nodes, the 500-acre golf course canal system with 101 nodes, the 300-acre Gabordy canal system with 60 nodes, and the 275-acre Murray Creek system with 20 nodes. Flood protection was the primary subject of this study; however, all direct discharges were identified and mapped. Potential flooding conditions were identified. BMPs were evaluated for each problem area. Cost estimates for each BMP were then developed. A 7-year capital improvements plan was developed to relieve them. NPDES requirements were identified in anticipation of future implementation requirements. In addition, ECT guided the city through the implementation of a





stormwater utility, including development of the stormwater utility fee. Since 1998, the master plan has been updated several times to satisfy State requirements, including preparation of an environmental and historical resource assessment for a state clearing house review. ECT has updated the master plan over the past few years to include newly annexed areas. A water quality study and flooding were primary elements of a recent update.

ECT recently conducted the GASB 34 stormwater infrastructure inventory update for the City to evaluate system life expectancy, current value, and software available to use for data storage and retrieval.

ADDITIONAL INFORMATION:

LOCATION:	<i>New Smyrna Beach, Florida</i>
CLIENT:	<i>City of New Smyrna Beach</i>
ADDRESS:	<i>210 Sams Avenue New Smyrna Beach, Florida 32168 Khalid Resheidat, P.E., 386 • 424-2209</i>
CONTRACT PERIOD:	<i>September 1998 through July 2008</i>
CONTRACT AMOUNT:	<i>\$140,000, \$25,000 (1998 update), \$185,000 (2001-2004 update) \$60,015 (2005)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Chris R. Fagerstrom, P.E.—Project Engineer</i>
■ <i>Steven G. Danskine, P.E.—Project Engineer</i>



PROJECT NO. 6—TMDL DEVELOPMENT AND MONITORING IN THE DETROIT RIVER

HIGHLIGHTS:

- TMDL report development
- Microbiological analysis
- Data evaluation and summary
- Stream monitoring
- Bacterial source tracking assessment
- Public meeting facilitation

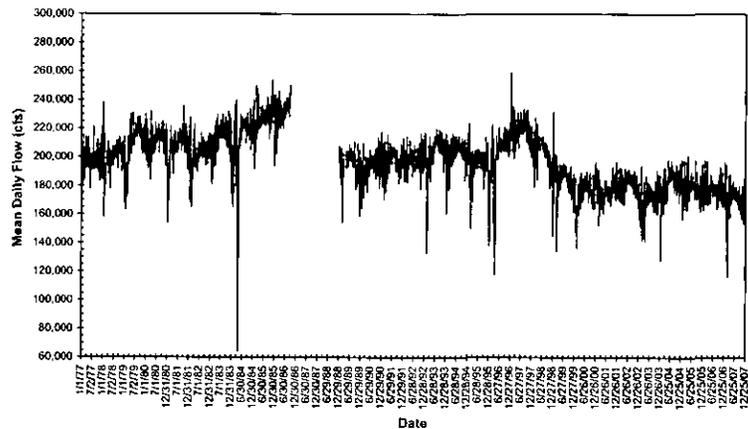
In preparation of two *E. coli* TMDLs, ECT, under prime contractor, RTI International, assessed the Detroit and Ecorse rivers for compliance with Michigan's water quality standards for *Escherichia coli* (*E. coli*) concentration at various sampling sites. Twenty-three consecutive weeks of sampling were performed along both rivers from May to October 2007. Transects were sampled on the Detroit River that ran between the U.S. and Canada and several sites were also sampled on the tributaries of the Ecorse River.



ECT prepared TMDL assessments for both waterbodies. This included determining the sources of *E. coli*, analyzing USGS and USACE streamflow data using flow duration curves, developing load duration curves to determine the loading capacity at various flow exceedence intervals, determining wasteload and load allocations for various point and nonpoint sources (i.e.: wastewater treatment plants, combined sewer outfalls, industry and municipal stormwater), addressing critical conditions and seasonality, and describing reasonable assurance activities. ECT led several meetings to gather public support of the TMDL process, with the goal of improving the water quality of both water bodies. EPA subsequently approved both TMDLs.

ECT's involvement on this effort included:

- Development an EPA- and MDNRE-approved QAPP.
- Collection of the samples during both dry and wet conditions for *E. coli* and DNA analysis using the Human Enterococcus ID™ and Human Bacteroidetes ID™ methods.
- Data analysis and interpretation.
- Final report preparation and presentation.
- Public meeting facilitation.
- Development of two TMDL reports with Clean Water Act-required elements.





ADDITIONAL INFORMATION:

LOCATION: Detroit River, Michigan
CLIENT: Subcontractor to RTI International
Client Contact at U.S. Environmental Protection
Agency, Region 5
ADDRESS: Watersheds & Wetlands Branch (WW-16J)
777 W. Jackson Blvd.
Chicago, IL 60604
Julianne Socha, 312 • 886-4436
CONTRACT PERIOD: January 2007—June 2008
CONTRACT AMOUNT: \$314,068

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- Sanjiv K. Sinha, Ph.D., P.E.—Project Director
- Annette DeMaria, P.E.—Project Manager
- Meghan Price—Field Manager
- Marty Boote—Senior Scientist

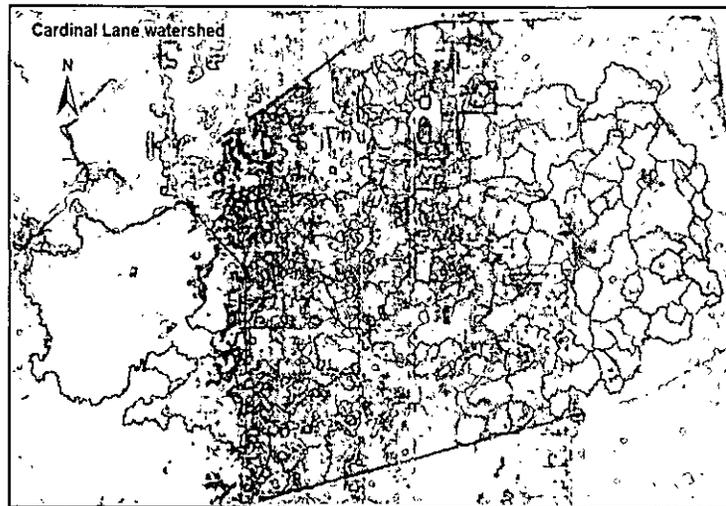


PROJECT NO. 7—CARDINAL LANE WATERSHED MANAGEMENT PLAN

HIGHLIGHTS:

- Watershed modeling (ICPR)
- LIDAR data and development of DEM
- Digital Flood Insurance Rate Maps (DFIRM)
- GIS and ArchHydro
- Watershed delineation
- Watershed inventory
- Best management practices
- GWIS database

The Cardinal Lane watershed, located in Citrus County, Florida, is a coastal basin with tidally-influenced, saline receiving water for surface water and groundwater inputs from the watershed. The large variation of topography within the watershed generates a variety of hydrologic conditions. The western portions of the basin are low in elevation and thus the influence of groundwater on runoff and storage is significant. The eastern portions of the watershed have much higher elevation, deep groundwater, widespread depressions, and highly infiltration soils. Thus, little surface runoff is produced. No streams and channels exist in the watershed to convey surface runoff. The watershed is a typical deranged watershed.



The objective of this project is to develop a watershed management program for Cardinal Lane watershed to provide a methodology to evaluate the capacity of the watershed to protect, enhance, and restore water quality and natural systems, while achieving flood protection. The program includes five major elements: digital topographic information, watershed evaluation, floodplain analysis and delineation, surface water resource assessment, and best management alternatives analysis.

ECT started the watershed management plan by first characterizing the existing situation of the watershed from all available data sources. The USGS quads maps, aerial photos, geologic reports, FEMA floodplain, Citrus County flood reports, environmental resource permitting, USGS flow discharge, well data, OneRain data, etc., were used to provide information for watershed evaluation. Lidar data were used to produce terrain, DEM, and contour lines. Field reconnaissance and public notification were performed to collect generic hydrologic and hydraulic features and flood information in the watershed to further refine the terrain and DEM and watershed delineation. A GWIS database was created to save the collected data. A combination of the ICPR watershed model and MODFLOW groundwater model will be developed to simulate surface water and groundwater and their interaction. Best management practices and data to produce updated Digital Flood Insurance Rate Maps (DFIRM) will be developed for the watershed.



ADDITIONAL INFORMATION:

LOCATION:	Citrus County, Florida
CLIENT:	Southwest Florida Water Management District
ADDRESS:	2379 Broad St, Brooksville, FL 34604 Nam Q. Nguyen, Project Manager, 352 • 796-7211, Ext: 4231
CONTRACT PERIOD:	April 2007—Ongoing
CONTRACT AMOUNT:	\$717,000 (to date)

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- Chris R. Fagerstrom P.E.—Project Manager/Project Engineer
- Chang X. Jin, P.E., Ph.D.—Project Engineer
- Ani Guha, Ph.D.—Project Engineer



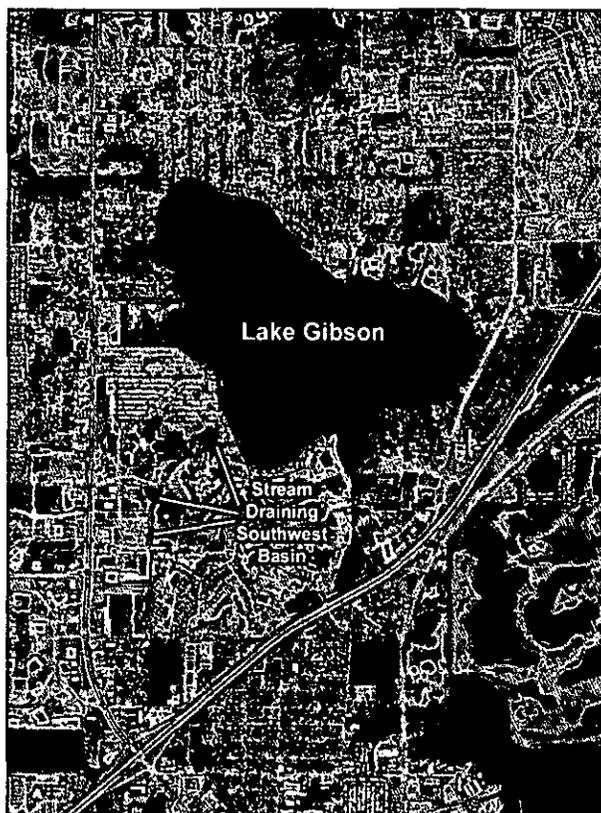
PROJECT NO. 8—LAKE GIBSON MASTER PLAN AND SOUTHWEST DRAINAGE BASIN STORMWATER MANAGEMENT SYSTEM RETROFIT

HIGHLIGHTS:

- Hydrology
- Modeling
- Development of BMPs
- Analysis of municipal infrastructure
- Ecology analysis
- Engineering analysis
- Water quality
- Stormwater

Lake Gibson, a 489-acre natural lake, is one of the 38-named lakes in Lakeland. Lake Gibson is unique in that it has excellent water quality and supports a well-balanced fauna. Due to the uniqueness of the lake and the difficulty in remediating nutrient-enriched waters, the City of Lakeland decided to take a proactive approach to reduce nutrient loading to the lake. This project entailed developing a stormwater management plan to identify and evaluate source reduction and source control practices to reduce the sediment and nutrient loading to the lake.

Continued development activities in the Lake Gibson watershed over the past 10 years created an increased threat to the water quality of the lake. The development was particularly heavy in the areas in the southwest part of the watershed. Land use in this 230-acre basin is mixed. A regional mall, highway widening, commercial development, and hotel and apartment construction have all occurred in recent years in this area. Surface runoff through the basin was channeled into a highly modified ditch/stream that runs from the upper reaches of the basin in the southwest to the discharge point at the lake. The extensive development of land contributed greatly to an increase in the peak runoff rates and volumes and also reduced the base flow. This has resulted in erosion of the stream channel with the deposition of eroded sediments and formation of a large sediment delta at the mouth of the stream. Stormwater runoff quality was documented as poor.



In general this project included an ecological and engineering analysis of the stream and the contributing watershed, characterization of the hydrology of the basin, modeling of the drainage system; estimation of pollutant loadings to Lake Gibson from this basin, and development of a conceptual plan to address and alleviate problems the water quality, erosion, and flooding potential problems that were identified by the City.



ECT designed a retrofit stormwater system consisting of two off-line flow-through filter marshes and one off-line sedimentation basin. This segment also included a planting plan and monitoring.

ADDITIONAL INFORMATION:

LOCATION:	Lakeland, Florida
CLIENT:	City of Lakeland Lakes and Stormwater Division
ADDRESS:	228 S. Massachusetts Avenue Lakeland, Florida 33801 Doug Gleckler, Manager, 863 • 834-8439
CONTRACT PERIOD:	January 2004—October 2010
CONTRACT AMOUNT:	\$418,263 (to date)

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ Chris R. Fagerstrom, P.E.—Project Manager/Project Engineer
■ Steven G. Danskine, P.E.—Project Engineer

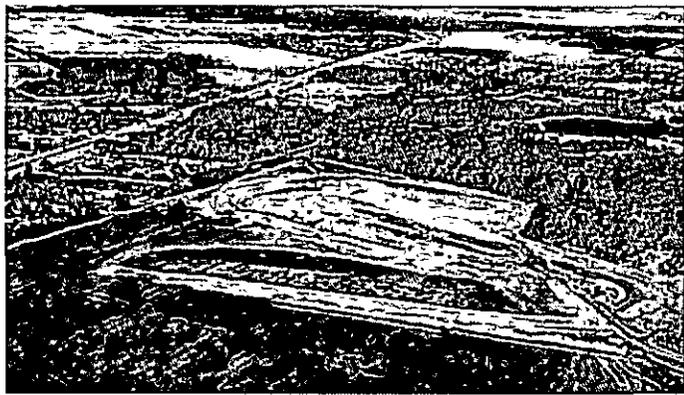


PROJECT NO. 9—WETLAND VEGETATION LANDSCAPE DESIGN PLAN DOG BRANCH-EDGEFIELD REGIONAL STORMWATER TREATMENT

HIGHLIGHTS:

- *Planting plan design*
- *Development of plant species data matrix*
- *Identification of source materials*
- *Pollutant loading reduction*
- *Mitigation cost estimations*
- *Recommendations on hydro-period maintenance*

SJRWMD constructed a regional stormwater treatment (RST) facility on County Road 207A in East Palatka, Florida. SJRWMD constructed the RST facility for the purpose of treating nutrient-enriched agricultural runoff before it enters the lower St. Johns River to satisfy the nutrient load reduction requirements for meeting the TMDLs set forth by EPA. The Dog Branch-Edgefield RST facility consists of a 25-acre wet detention pond at the forefront for initial treatment of agricultural runoff from an approximately 2,028-acre watershed, followed by a 56-acre treatment wetland for final treatment before discharging into the lower St. Johns River.



ECT was contracted by SJRWMD to provide a detailed schematic landscape design and planting plan using AutoCAD that identifies the proposed native plant species and the density and spacing of plants for each type of hydrologic or eco-zone. SJRWMD requested that ECT develop a planting plan that incorporated a diverse assortment of desirable and aesthetically pleasing native plant species capable of nutrient removal and being suitable for media/public touring venues and educational purposes. The wetland was designed to include multiple eco-zones such as a deep water zone, high and low marsh zones, and three upland peninsulas. In addition to the planting plan, ECT conducted research on the native plant species proposed for the treatment facility that exhibited the highest potential for the uptake of nitrogen, phosphorous, and/or total suspended solids. ECT also developed an estimation of mitigation related costs for the planting effort and identified potential sources for the plant materials. Finally, ECT made recommendations on how SJRWMD could maintain an adequate wetland hydro-period in order to re-hydrate the wetland treatment system during droughty periods over the first year after initial planting. ECT submitted all of the deliverables to SJRWMD ahead of schedule. SJRWMD appreciated how ECT provided assistance throughout the project and produced a quality product within a tight timeframe.



ADDITIONAL INFORMATION:

LOCATION:	County Road 207A, East Palatka, Florida
CLIENT:	St. Johns River Water Management District.
ADDRESS:	P.O. Box 1429 Palatka, FL 32178-1429
CLIENT CONTACT:	Pam Livingston Way, 386 • 329-4426
CONTRACT PERIOD:	August 1, 2007 through August 27, 2007
CONTRACT AMOUNT:	\$25,000

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- **Larry J. Danek, Ph.D.—Project Manager**
- **Anthony N. Arcuri—Assistant Project Manager/Principal Ecologist**
- **Chris R. Fagerstrom, P.E.—Hydrological Engineer**
- **Maya R. Scohier—Ecologist**
- **James E. Poppleton—Ecologist**

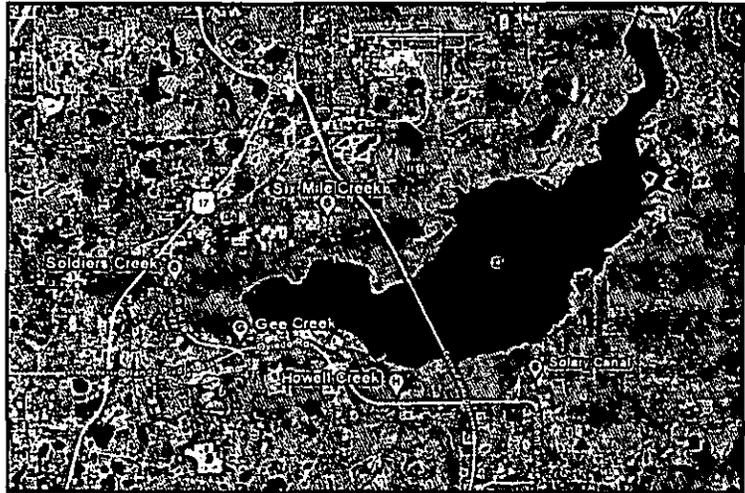


PROJECT NO. 10—LAKE JESUP STORM EVENT SAMPLING FOR SEMINOLE COUNTY

HIGHLIGHTS:

- Storm event sampling
- ISCO® samplers
- QA/QC of data
- Data interpretation
- Monthly and final reports

The Seminole County Stormwater Division actively monitors the water quality of tributaries to Lake Jesup in response to the impaired water status of the Lake. One of the ongoing projects involves storm event sampling of five tributaries: Six Mile Creek, Gee Creek, Howell Creek, Soldiers Creek, and Solary Canal. Rainfall, flow volume, and flow depth data are continuously measured.



ECT's Lake Jesup stormwater sampling sites

The project involves the development and implementation of a quality assurance project plan as approved by the Florida Department of Environmental Protection (FDEP). Additional responsibilities include the collection of composite and grab samples following large storm events, delivery of samples to the NELAC-certified analytical laboratory, data analysis, QA/QC, statistical analysis of analytical results, and annual reporting of the results.



At each collection station, ECT installed ISCO® Avalanche automatic samplers, equipped with an ISCO® 674 rain gauge and ISCO® 750 flow module. The samplers are also equipped with telemetry to alert personnel when the sampler enables to initiate sampling, and the site is equipped with a solar panel to recharge batteries used as a power source. Chain-of-custody forms and sampling protocols in accordance with the current FDEP standard operating procedures are utilized to ensure the samples are analyzed within specific holding times.

Data obtained from each stormwater sampling event (nutrients and other chemical and physical parameters) are reviewed for conformance with QA/QC guidelines. To maintain data quality, measured flow and rainfall data are compared to flow and rainfall measured by nearby U.S. Geological Survey gauge stations. A final report on flow rates and nutrient loading is prepared on an annual basis. ECT has been performing sample collection and station maintenance at these five tributaries since 2004.



ADDITIONAL INFORMATION:

LOCATION:	<i>Lake Jesup, Seminole County, Florida</i>
CLIENT:	<i>Seminole County</i>
ADDRESS:	<i>520 W. Lake Mary Blvd., Suite 103 Sanford, FL 32773-7424 Ms. Marianne Pluchino, 407 • 665-2456</i>
CONTRACT PERIOD:	<i>June 2004—Ongoing</i>
CONTRACT AMOUNT:	<i>\$308,823 (to date)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Chris R. Fagerstrom, P.E.—Project Manager</i>
■ <i>Gary P. Dalbec—Project Scientist</i>



SW-B.2. Names and Descriptions of Relevant Projects Presently Under Contract

In Section SW-B, ECT presented ten projects to show our experience in stormwater engineering. ECT also has several additional projects under contract. Representative projects (not all inclusive) are provided in the following table:

Client	Brief Project Description	Completion Date
City of Titusville	Evaluate, design, and permit a regional stormwater park. Project tasks include watershed modeling, stormwater retrofitting, and wetland marsh design.	11/2011
City of Gainesville	Design and permit a regional stormwater park. Project highlights include stormwater pump station design, onsite wetland mitigation, baffle box design, lined ponds, and 1,300 linear feet of bulk head wall.	11/2012
SeaWorld Parks and Entertainment	NPDES permit compliance.	9/2013
City of Edgewater	Stormwater monitoring to determine system efficiency.	8/2012
Keystone	Bulk terminal stormwater management system design.	8/2011
Marathon Oil	ERP determination for an existing facility.	3/2011
FDEP	Stormwater monitoring and flow rating.	5/2012
SWFWMD	Provide technical personnel to supplement District personnel in water resource engineering, modeling, permit review and approval, data management, and facilitating public involvement.	9/2013
Town of Fort Myers Beach	Federal, state, and locally funded water quality and quantity retrofit project for a 1.5-mile stretch of arterial highway.	5/2011
City of Fort Myers	Stream water quality restoration and improvement for Manuels Branch.	5/2011



Client	Brief Project Description	Completion Date
SFWMD	Risk assessment, water quality improvements, QA, contamination assessments, and other water resource-related consulting as part of the Comprehensive Everglades Restoration Project.	4/2016
Tampa Electric Company	Stormwater modeling and consulting for permitting and construction of upgrades to a 2.5-mile segment of power transmission line, access road, and river crossing at New River.	5/2011

SW-B.3. Firm’s Process and Procedures for Insuring Conformance to Current Design Standards, Codes and Other Regulatory Direction

ECT recognizes its responsibility as a professional consulting firm to always be aware of current rules, regulations and standards, so that we can provide our clients with the highest quality services. ECT’s Tallahassee office staff are well versed in the Leon County regulatory environment, as well as the federal, state and regional regulations that typically apply to projects that would be likely to be assigned under this RFQ.

Additionally, ECT uses processes and procedures that serve to keep our employees current on changes in design standards, codes, and other regulatory direction, including the following:

- ECT’s established Corporate Quality Plan (CQP), which defines the policies and procedures for controlling the quality of all facets of ECT’s technical work, including field data collection, field survey methods, data analyses, and project deliverables, as well as efforts performed by subcontractors, and project communications.
- Interim technical reviews conducted at appropriate project milestones by senior technical staff not directly involved in production work for the task to be reviewed.
- During the development of a proposal for a new task assignment under a continuing services agreement, ECT’s project staff will routinely review, as needed, applicable federal, state, regional and local design standards, codes and regulatory guidance documents prior to finalizing the proposal and initiating the new project.
- ECT engineers and scientists typically hold at least one pre-application meeting with applicable permitting agencies for a new project that appears to have the potential for a significant degree of permitting complexity. The purpose of the pre-application meeting is begin a dialogue with the permitting agency, to identify potential obstacles to project execution and completion, and to ensure



the path to obtaining needed permit approvals and completing the project is well defined. Such meetings are typically held at project inception, and follow-on meetings are often appropriate prior to permit application submittals for more complex projects, or for evolving project concepts. It is often advantageous to hold at least one such meeting onsite.

- ECT's corporate culture encourages its engineers and other project professionals to maintain active membership, and to pursue leadership roles, in a variety of professional associations and societies (see individual resumes). Our employees are currently well represented in the membership of the Florida Stormwater Association, the Florida Section, American Water Resources Association, the Florida Lake Management Society, and similar professional organizations.
- ECT also encourages its professionals to author and present papers on current topics at professional meetings.
- ECT strongly encourages its professionals to achieve and maintain industry-standard certifications as appropriate to their area of specialization.
- ECT has established a water resources/natural resources practice line that holds regular firm-wide conference calls, typically on a quarterly schedule. These calls provide a forum for coordination on current technical and regulatory issues on a firm-wide basis, and serves as a starting point for ongoing local, state and region-specific in-house discussions. All of the key personnel identified for this project are members of ECT's water resources/natural resources practice line.

In addition to the above listed practices, our professionals keep current with applicable design standards, codes and regulations through other means such as the following:

- Project assignments that involve reviewing ordinances and building codes for the state, various counties, and cities where we also provide design services.
- Membership in various local and state agency technical committees.
- All professional engineers on the project team, including the project manager and assistant project manager, and the engineering task managers, are subject to continuing education requirements applicable to their field of practice.
- The project manager for this work category, as a certified D.WRE, is subject to significant additional continuing education requirements, amounting to 30 professional development hours (PDH) per year. The assistant project manager, due to the credentials he maintains, is also subject to a 30 PDH per biennium requirement.
- Because of ECT's many agency clients, we have ongoing access to developing information on regulatory changes.

Finally, ECT provides in-house technical training sessions (e.g., brown-bag seminars) several times a year to promote depth of knowledge and cross-training. Because of the nature of our services, these training sessions necessarily include coverage of pertinent regulatory considerations and "developing stories" in the regulatory realm.

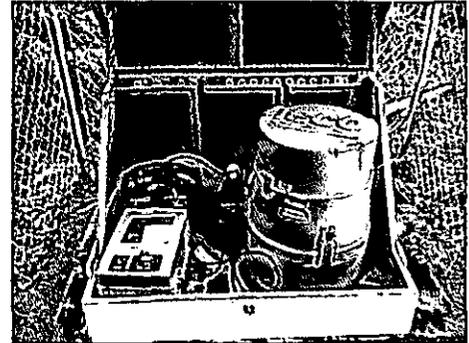


SW-B.4. Basic and Special Resources Available to the Firm for Performance of Project Duties in this Work Category.

A professional team of environmental consultants such as ECT's must be backed up by the essential facilities and equipment. The most essential equipment and software for this project include:

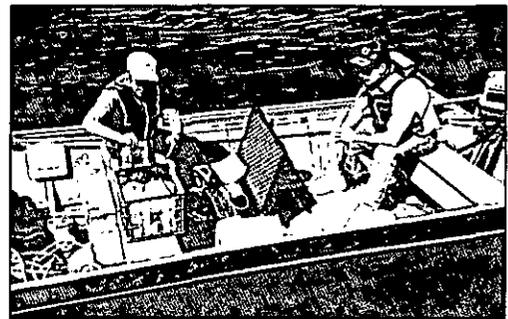
• **Surface Water Equipment (Remote Sensing)**

- ISCO® Avalanche samplers
- ISCO® Model 750 area velocity flow modules
- ISCO® Model 674 rain gauges
- ISCO® Model 4250 flow sensors
- Protective housing enclosures
- Solar panels
- Cables and wiring harnesses, complete set per station
- ISCO® SPA 1489 digital cellular modems
- ISCO® software/lap top computers for data downloading



• **Other Surface Water Equipment**

- YSI® Model 556 pH, temperature, conductivity, and DO meter
- Hydrolab® Surveyor II water quality meter
- pH/conductivity meters (various manufacturers)
- Price-AA velocity meter
- Pygmy velocity meter
- Marsh-McBirney electromagnetic velocity meter
- Checkmate® water quality meters
- Teledyne Gurley® current meters
- Turner Designs® Model 10-005 fluorometer
- Water sampling bottles
- Leupold & Stevens® water level/tide recorders
- Turbidimeter
- Fathometer
- LORAN navigation system
- Global positioning system (GPS)
- Marine radios
- Water level gauges
- Teledyne portable samplers
- Rain gauges



• **Miscellaneous**

- Vehicles (4WD, etc.)
- Survey equipment
- Cameras (digital, various)



- Stereoscopes
- Portable electric generators
- Safety equipment (Level A through D)
- Self-contained breathing apparatus
- Metal detector
- Electronic depth finders

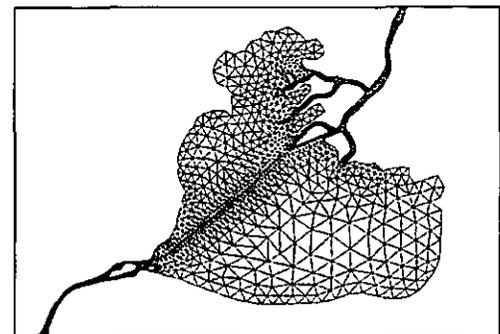
- **Computers and Peripherals**
 - Windows® Server 2000/2003 network
 - Intel® Xeon dual and quad processor based servers (5 TB storage)
 - CAD/GIS dedicated workstations
 - Intel Core 2 duo, Core i3, quad, and Pentium 4 processor-based PCs
 - 3.0 HZ dual core ESRI GIS workstations
 - RAID and LTO2 and -3 based backup system
 - CD and DVD writing capabilities
 - Mobile user remote access capable
 - Laser printers—black and white and color
 - Scanners—black and white and color
 - Full-size color plotting capabilities
 - Digital copying capabilities
 - Internet access
 - Ultra Mobile PC (UMPC) Ruggedized Panasonic Toughbooks (with GPS/ArcPad)
 - Trimble GeoXT and Trimble Ranger GPS units
 - ESRI ArcMap Arc/Info, ArcEditor, and ArcView
 - ESRI 3D Analyst and Spatial Analyst (Raster calculator)
 - LP360 - LiDAR Analysis
 - GRASS GIS - Specialized Modules for Hydrology
 - HSPF/WinHSPF
 - HSPEXP (expert system that assists with the calibration of HSPF models)
 - GenScn (GENERation and analysis of model simulation Scenarios)
 - BASINS3
 - MODFLOW-GMS
 - MODFLOW-GW Vistas
 - GSFLOW
 - PEST
 - Microsoft® Word for Windows, Version 97 through 2007 (word processing)
 - Microsoft® Excel Version 97 (spreadsheet) through Excel 2007
 - Microsoft® Power Point 97 (presentation package) through Power Point 2007
 - Microsoft® Project 2007
 - Microsoft® Access 2007 (relational database)
 - Adobe® Acrobat 9



• **Numerical Models**

Surface Water

- | | |
|--|--|
| <ul style="list-style-type: none"> ○ AdICPR ○ CE-QUAL-W2
 ○ EFDC ○ Visual Hydro ○ XP-SWMM ○ SWMM-IV ○ EXTRAN ○ HEC-1 ○ HEC-2 ○ HEC-HMS ○ HEC-RAS ○ WASP ○ HSPF
 ○ QUAL2E ○ RECEIV-II ○ CAFE
 ○ DISPER ○ PLUME ○ DEM ○ CORMIX ○ DCORMIX ○ CORMIX-GT ○ VPLUME ○ FORFLO ○ RMA2 ○ SMS/BOSS ○ BASINS3 ○ GENESIS ○ SBEACH ○ RCPWAVE ○ Pond Pack ○ TR-20 | <ul style="list-style-type: none"> Interconnecting pond routing model Two-dimensional laterally averaged hydrodynamic and water quality model Three-dimensional hydrodynamic and water quality SWMM/EXTRAN models with graphical interface SWMM/EXTRAN with GUI Stormwater management Dynamic flow routing model Surface runoff hydrograph Flood routing Surface hydrology Water surface profiles Surface water quality Surface runoff and runoff quality Riverine water quality Receiving water quality Two-dimensional estuarine or lake circulation Two-dimensional estuarine or lake circulation Near-field mixing zone Dynamic estuarine Mixing zone analysis Dredged material disposal Windows version of CORMIX Initial mixing zone Forest floodplain succession model Two-dimensional circulation and dispersion model Two-dimensional circulation and dispersion model GIS-based watershed and water quality model Shoreline movement model Beach erosion model Wave refraction model Detention pond design Stormwater runoff |
|--|--|



Groundwater

- | | |
|--|---|
| <ul style="list-style-type: none"> ○ GW VISTAS ○ MOD INV ○ MODFLOW ○ MODFLOW EM ○ MODPATH | <ul style="list-style-type: none"> ESI – MODFLOW Package Parameter optimization USGS, 3-D groundwater flow model Extended memory version USGS, 3-D particle tracking program |
|--|---|



- PRE/POST MOD Pre- and post-data processor for MODFLOW
- MODRET MODFLOW for retention ponds
- ZONEBUDJET Subregion zone, budget package
- MOC USGS, 2-D solute transport and flow model
- PREMOC Pre-data processor for MOC
- MOC NRC USGS MOC Code modified for Nuclear Regulatory Commission
- MT3D 3-D contaminant transport model
- PLASM Prickett & Lonquist, 2-D, aquifer simulation model
- AQTESOLV Geraghty & Miller aquifer test solving program
- SUTRA USGS, 2-D saturated/unsaturated transport and flow model
- WHPA IGWMC wellhead protection area program
- BIO PLUME II RIFA, simulation of transport and biodegradation of dissolved hydrocarbons
- ROKEY SYSTEM 3-D, analytical contaminant transport model
- LUCKY 7/NO DCAV Parameter estimation models

SW-C. WILLINGNESS TO MEET SCHEDULE AND BUDGET REQUIREMENTS

In the consulting industry, repeat business from satisfied customers allows companies to grow and prosper. To obtain repeat business, environmental consultants must provide clients with a quality product that not only meets expectations, but is also delivered on schedule and at or below the budgeted cost. ECT has grown over the years as a result of providing quality products on schedule and budget. **ECT commits to Leon County for this proposal that we will meet all schedules and budget requirements.** ECT has had several projects with the County over the past 5 years where we were successful in meeting schedule and budget requirements.

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

SW-D.1. Names and Descriptions of Projects for Which Firm is Presently Under Contract and the Anticipated Completion Dates of Those Projects.

ECT has between 1,000 and 1,100 projects active at any given time. These projects are valued from a few hundred dollars to over \$20 million in size. Because ECT has so many projects active, we are providing a representative listing of some of our larger projects in Florida, and also some managed out of the Tallahassee office. Known or estimated completion dates are provided for these projects. The "ongoing" project designation is used where ECT has a contract to provide services on a task basis without an end date for the overall contract.



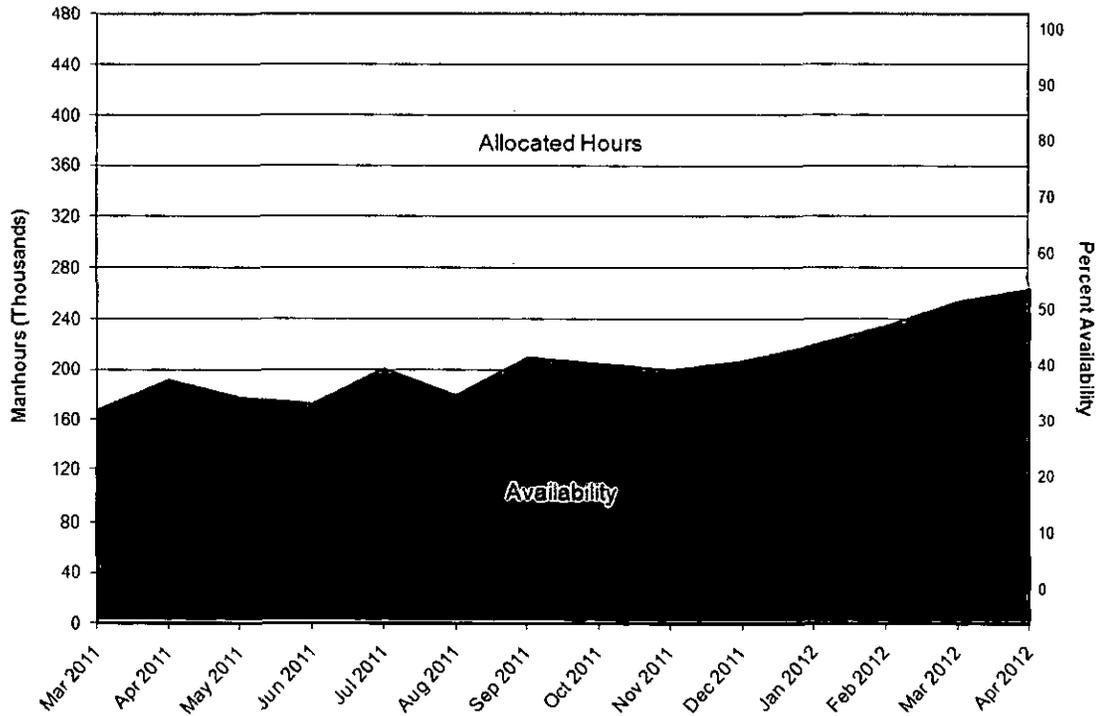
Client	Management Office	Brief Project Description	Completion Date
The Pantry	Gainesville	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing
Scaff, Inc.	Tallahassee	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing
NFWFMD	Tallahassee	Permit reviews and approvals for ERP applications.	9/2011
City of Tallahassee	Tallahassee	Brownfield site remediation	9/2011
City of Carrabelle	Tallahassee	Wharf restoration project	12/2011
City of Gainesville	Gainesville	Remediation of brownfield site and design and construction of stormwater park.	12/2011
SWFWMD	Tampa	Provide technical personnel to supplement District staff in all areas of water resource engineering, modeling, and data management.	9/2013
Hillsborough County Airport Authority	Tampa	Provide environmental consulting services to assist in acquisition of property and expansion of Tampa International Airport.	9/2015
FDEP	Gainesville	Petroleum remediation services.	9/2012
SFWMD	Fort Lauderdale	Risk assessments, contamination assessments, QA, and remediation at land acquisition sites in South Florida.	5/2016
Mosaic Fertilizer, L.L.C.	Tampa	Developments of regional impact, permitting, and environmental consulting with respect to expanding phosphate mining areas in central and southwest Florida.	Ongoing
Alachua County	Gainesville	Environmental consulting services on a task order basis.	9/2013
The Nature Conservancy	Orlando	Phase I/II ESAs, contamination assessments, and other environmental	Ongoing



Client	Management Office	Brief Project Description	Completion Date
		consulting services.	
Major theme park (confidential)	Orlando	Provide regulatory compliance, contamination assessments, remediation, O&M of remediation systems, and other environmental consulting services.	Ongoing
ScaWorld	Orlando	Provide NPDES permitting and other environmental consulting services.	9/2013
Tampa Electric Company	Tampa	Provide environmental consulting services on a task order basis.	Ongoing
Volusia County	New Smyrna Beach	Provide Phase I/II ESAs, contamination assessments, remediation, risk assessments, and other environmental consulting services on a task order basis.	9/2012

SW-D.2. Firm’s Ability to Absorb Any Projects Resulting from this Contract

ECT’s project team has more than adequate staff availability to complete any projects assigned by Leon County in a timely and efficient manner, as shown in Section SW-A1. The following table has been provided to indicate the percentage availability for both the ECT staff and the key subcontractor proposed for this project during 2011. The graph provided depicts the projected ECT company backlog (allocated hours) and percent availability for 2011. ECT has a staff of 232, with over 170 personnel located in eight Florida offices. From the Florida staff, we have sufficient depth of qualified and experienced personnel to provide any level of additional technical support beyond the primary project team (shown on organizational chart) that the project may need, and make a commitment to meet all scheduling requirements.



SW-E. EFFECT OF PROJECT TEAM LOCATION

As described earlier in this proposal, the project will be managed from ECT’s local office in Tallahassee. It is anticipated that most of the work will be completed by our local office and subcontractors located in Leon County. ECT’s local personnel can be at the County’s project management office in less than 15 minutes, and have shown the ability to provide this response time on previous County contracts.

In the event additional personnel are needed, ECT will primarily utilize our offices in Florida. In the event a unique task is assigned that is more applicable to personnel in other offices, we will provide those personnel as required. Our intent is to minimize travel cost (and thereby reduce costs to the County) by using the Internet, video conferencing, and telephone if we need to interface with personnel in other offices. We routinely interface between offices on many company projects that are ongoing.

SW-F. APPROACH TO THE PROJECT

ECT’s proposed approach to accepting and completing specific projects assigned under this contract may vary considerably depending upon the nature of the assignment, but as an example a generic project approach, which could be applied to a variety of common stormwater infrastructure design-bid-build projects, is summarized as follows:



Contract Kick-Off

Upon award of the contract, ECT's project management team will schedule a kickoff meeting with Leon County contract management personnel to discuss the contract and review the general scope, scheduling needs, budgetary constraints, relative priorities and client expectations relative to ECT's performance under the contract.

Task Negotiation

For specific tasks in which the County desires ECT's services, it is anticipated that task negotiations will generally proceed as follows:

Problem Definition

ECT will conduct a needs assessment to clearly define the problem to be addressed. Although the details of a needs assessment are highly task-specific, this commonly begins with an informal conversation, aided by review of background graphics, correspondence, and other relevant information, leading to a problem definition that is mutually satisfactory to the County and ECT. An initial site visit and an initial review of background site information, such as County records or public databases, may be appropriate at this stage.

Project Approach

For projects of significant complexity, ECT will develop a proposed project approach for the County's concurrence. Conceptual pre-application discussions with permitting agency personnel may be appropriate at this stage, and further discussion between ECT and the County may be required, leading to identification of specific County expectations for satisfactory completion of the project, and agreement between the County's project manager and ECT on a task-specific project approach. For relatively straightforward projects, County review in this step may not be needed and in such cases, ECT will progress to Proposal Development.

Proposal Development

ECT will develop a proposal defining a scope of services, budget and schedule that is proposed by ECT to implement the selected project approach. The proposal will also identify any applicable project deliverables and associated timeframes, meeting schedules and travel requirements as applicable. Following County review, any necessary adjustments to the proposal will be negotiated between the County and ECT, leading to issuance of a project-specific Task Authorization to ECT by the County.

Task Performance

Following ECT's receipt of a project-specific Task Authorization from the County, ECT will proceed with completion of the authorized scope of services, generally as follows:

Project Kick-Off

ECT will schedule and conduct internal and client kick-off meetings appropriate to the Task Authorization. Internal kick-off meeting participants will typically



consist of the ECT project team professional staff and in some cases subcontractor personnel. Client kick-off meeting participants will typically consist of County staff, ECT's project manager and possibly key ECT project personnel, and in some cases subcontractor personnel and/or third-party stakeholders.

Project Performance

ECT will complete the project assigned under the terms of the approved Task Authorization, including conduct of applicable agency pre-application meetings and/or public meetings, performance of the scope of services, and preparation of deliverables. The following are examples of tasks that will commonly be included in the scope of services for a stormwater engineering project:

- Conduct a detailed desktop analysis of site-specific information obtained from such sources such as TLEGIS, the NRCS Web Soil Survey, the U.S. Fish & Wildlife Service National Wetland Inventory online mapping tool, FDEP's LABINS website, the Leon County Property Appraiser's website and other public databases.
- Onsite evaluation of existing conditions by ECT engineers and scientists, and applicable subcontractors, such as, for example, surveyors and geotechnical specialty consultants.
- Evaluate site constraints (e.g., land use/zoning issues, property ownership issues, possible presence of wetlands, listed species/habitat issues, severe slopes, etc.) and/or hindrances to project completion.
- Develop and evaluate conceptual alternative design solutions and prepare a preliminary engineering design. Initial modeling of hydraulics and hydrology, and/or feasibility studies, may be appropriate for some projects at this stage.
- Hold pre-application agency meetings to review the selected preliminary design.
- For some projects, it may be appropriate to hold public outreach events (e.g., neighborhood open house) and third-party stakeholder meetings .
- Adjust preliminary design and revisit agency pre-application meetings if appropriate.
- Obtain planning level project approvals as needed.
- Prepare final engineering design, specifications, and permitting documents. Hold additional pre-application meetings to review project concept changes implemented during the final design process, if appropriate.
- Provide bidding and bid review assistance as desired by the Department.
- Attend the onsite pre-construction conference with the County's project manager, construction contractor, applicable subcontractors and other parties (e.g., construction material suppliers) as appropriate, to formally introduce all parties, to accomplish project administrative coordination, to reinforce project communication, notification, submittal and 3rd party testing protocols as spelled out in the contract documents, to review permit compliance issues, etc.



- Provide construction administration services during project build-out and review any 3rd-party testing results.
- Complete record (sometimes called “as-built”) drawing certifications and close out construction phase permits.

APPENDIX A

**COMPANY AND INDIVIDUAL
LICENSES AND REGISTRATIONS**

Licensee Details

Licensee Information

Name: **Environmental Consulting & Technology, Inc. (Primary Name)**
(DBA Name)
Main Address: **3701 NW 98th Street**
GAINESVILLE Florida 32606
County: **ALACHUA**
License Mailing:
LicenseLocation:

License Information

License Type: **Certificate of Authorization**
Rank: **Cert of Auth**
License Number: **5520**
Status: **Current,Active**
Licensure Date: **11/29/1989**
Expires: **02/28/2013**

Special Qualifications Qualification Effective

[View Related License Information](#)

[View License Complaint](#)

Contact Us :: [1940 North Monroe Street, Tallahassee FL 32399](#) :: Call.Center@dbpr.state.fl.us :: Customer Contact Center
850.487.1395

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Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions regarding DBPR's ADA web accessibility, please contact our Web Master at webmaster@dbpr.state.fl.us.

**ECT HAS NOT YET RECEIVED PERMANENT
RENEWAL LICENSE. SEVERAL OF THE STAFF RENEWAL
LICENSES HAVE BEEN APPLIED FOR,
BUT NOT YET RECEIVED.**

AC# 4995777

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

SEQ# L10061501486

DATE	BATCH NUMBER	LICENSE NBR.
06/15/2010	090484128	GB42

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

ENVIRONMENTAL CONSUL & TECH, INC.
3701 NW 98TH ST
GAINESVILLE FL 32606

CHARLIE CRIST
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHARLIE LIEM
INTERIM SECRETARY

State of Florida

Department of State

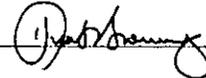
I certify from the records of this office that ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC. is a corporation organized under the laws of Delaware, authorized to transact business in the State of Florida, qualified on February 1, 1989.

The document number of this corporation is P22824.

I further certify that said corporation has paid all fees due this office through December 31, 2011, that its most recent annual report was filed on February 18, 2011, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Nineteenth day of February, 2011



Secretary of State



Authentication ID: 000195025170-021911-P22824

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed
<https://efile.sunbiz.org/certauthver.html>

<p style="text-align: center;">State of Florida Board of Professional Engineers Leland Andrew Smith, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 2/28/2013 P.E. LIC. NO: AUDIT NO: 228201319482 50794</p>	<p style="text-align: center;">State of Florida Board of Professional Engineers Ronald H. Tellez, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28-FEB-11 P.E. LIC. NO: AUDIT NO: 228201120317 DISPLAY AS REQUIRED BY LAW 38496</p>
<p style="text-align: center;">State of Florida Board of Professional Engineers Chris R. Williams, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28-FEB-11 P.E. LIC. NO: AUDIT NO: 228201122019 DISPLAY AS REQUIRED BY LAW 76308</p>	<p style="text-align: center;">State of Florida Board of Professional Engineers Ronald M. Edenfield, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 2/28/2013 P.E. LIC. NO: AUDIT NO: 228201314072 45200</p>
<p style="text-align: center;">State of Florida Board of Professional Engineers Steven C. Provost, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28-FEB-11 P.E. LIC. NO: AUDIT NO: 228201115429 DISPLAY AS REQUIRED BY LAW 18173</p>	<p style="text-align: center;">State of Florida Board of Professional Engineers Domenick V. DiStasio, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28-FEB-11 P.E. LIC. NO: AUDIT NO: 228201126621 DISPLAY AS REQUIRED BY LAW 56801</p>
<p style="text-align: center;">State of Florida Board of Professional Engineers Bradley S. Vance, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 2/28/2013 P.E. LIC. NO: AUDIT NO: 228201301223 43746</p>	<p style="text-align: center;">State of Florida Board of Professional Engineers Steven G. Danskine, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28-FEB-11 P.E. LIC. NO: AUDIT NO: 228201112974 DISPLAY AS REQUIRED BY LAW 62488</p>
<p style="text-align: center;">State of Florida Board of Professional Engineers Ivan Bei-Zu Chou, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 2/28/2013 P.E. LIC. NO: AUDIT NO: 228201309740 30688</p>	<p style="text-align: center;">State of Florida Board of Professional Engineers Chang Xing Jin, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 2/28/2013 P.E. LIC. NO: AUDIT NO: 228201310814 65822</p>
<p style="text-align: center;">Yang No. 61324</p>	<p style="text-align: center;">State of Florida Board of Professional Engineers Doyle Edward Cottrell, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28-FEB-11 P.E. LIC. NO: AUDIT NO: 228201116831 DISPLAY AS REQUIRED BY LAW 58188</p>
<p style="text-align: center;">State of Florida Board of Professional Engineers Bradley S. Petas, P.E.</p> <p style="text-align: center;"><small>IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES</small> EXPIRATION: 28 FEB-11 P.E. LIC. NO: AUDIT NO: 228201120812 DISPLAY AS REQUIRED BY LAW 46867</p>	<p>AD 0925657 STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION BOARD OF PROFESSIONAL ENGINEERS SE061026018133</p> <p>On: 02/28/2012 08:27:48J 001182 The PROFESSIONAL GEOLOGIST Named below IS LICENSED Under the provisions of Chapter 452 F.S. Expiration date: JUL 31, 2012</p> <p>NOTY: RONALD R 2405 POBLE DR TALLAHASSEE FL 32308</p> <p>CHARLES CRIST GOVERNOR DISPLAY AS REQ. BY LAW CHARLIE LILLY INTYTRK SECRETARY</p>

APPENDIX B
RESUMES OF PROJECT SUPPORT PERSONNEL



RONALD M. EDENFIELD, P.E.
Senior Engineer II

Project Assignment: Stormwater Engineering

Education

B.S., Agricultural Engineering—
University of Georgia, 1983

Years with ECT—12
Other Firms—17

Registrations

Professional Engineer, Florida,
No. 45200

Affiliations

American Water Resources Association, State Board Member
Fort Myers Kiwanis Club, Member and Past President
Lee Soil and Water Conservation District, Past Chairman
IMPACT of Lee County, Inc., Board Chairman
American Society of Civil Engineers, Member
Lee County Local Planning Agency, Past Member

Areas of Specialization

Surface and Ground Water Management Systems Design and Permitting, Ecosystem Hydrological Restoration, Stormwater Quantity and Quality Treatment Systems Design and Permitting, NPDES Pollution Prevention System Design

Project Manager; City of Fort Myers Stormwater Master Plan, City of Fort Myers—Evaluate the existing stormwater management system within the corporate limits of the City of Fort Myers for the purpose of recommending stormwater retrofit and water quality improvement systems in order to meet NPDES and TMDL requirements for discharges from the City's MS4 system.

Project Manager; Estero Boulevard Improvement Project, Lee County Board of County Commissioners—Provide drainage and water quality treatment system design for Estero Boulevard. Coordinate with teams members on location of, and design criteria for, improvements to the primary transportation corridor within the Town of Fort Myers Beach; including treatment system options, treatment system siting, outfall identification, and recommendations for improvements and state permitting.

Project Manager; Babcock Ranch Preserve, Florida Department of Agriculture and Consumer Services—Responsible for hydrological assessment of state- and county-owned land in Charlotte and Lee Counties in the Babcock Ranch Preserve area.

Project Manager; North Estero Boulevard Drainage and Water Quality Retrofit Project, Town of Fort Myers Beach—Stormwater and civil engineering, design, permitting, and construction management for a Hazard Mitigation Grant Program (HMGP)/South Florida Water Management District (SFWMD)-funded drainage and water quality improvement project for the north portion of Estero Boulevard from Time Square to Bowditch Point. Project requires redesign of existing arterial roadway to address chronic flooding problems while including innovative stormwater treatment elements to protect the estuarine receiving water bodies.

Senior Engineer, Watershed Evaluation, City of Bonita Springs—Responsible for evaluation of watersheds contributing flow to the Bonita Springs corporate area (for purposes of determining impacts of potential development to the water resources of Bonita Springs).

Senior Engineer, Density Reduction/Groundwater Recharge Watershed Evaluation, Lee County—Responsible for assessment of marketable limerock mineral deposits within Lee County, Florida. Provided data assessment and groundwater modeling.

Project Manager; Flood Litigation; Williams Farms, Inc.—Provide hydrologic and hydraulic assessment and expert witness for flooding litigation.

Project Manager; Billy Creek Filter Marsh Project, City of Fort Myers—Design, permitting, and construction management of an off-line treatment marsh adjacent to Billy Creek, an urbanized natural creek system. The created system will settle and filter urban stormwater runoff from the creek prior to discharge into a cypress wetland that is to be restored as part of the project. The cypress system will return flows to Billy Creek which flows into the Caloosahatchee River.

Project Manager; Manuel's, Carrell & Winkler Canal Retrofit Project, City of Fort Myers—Design, permitting, and construction management of canal retrofit project for the purpose of improving stormwater quality prior to discharge to the Caloosahatchee River. The retrofit includes diversion weirs, off-line treatment, and stream-bank restoration.

Project Manager; Beach Retrofit Project, Town of Fort Myers Beach—Stormwater civil engineering, design, permitting, and construction management for a town-wide drainage retrofit program to provide enhanced stormwater quality in accordance with NPDES and State of Florida guidelines. Program calls for retrofit of existing drainage systems in intensely developed residential and commercial areas to reduce nuisance flooding, and requires a net beneficial water quality improvement of the drainage system.

Project Engineer; Hydraulic Analysis, Florida Power & Light Company—Performed hydrologic/hydraulic analysis on 7 miles of power line access and maintenance road through the environmentally sensitive C.M. Webb Wildlife Management area in Charlotte County, Florida. Provided detailed assessments and mappings of wetlands, surface water basin, and sub-basin delineation; and field supervision of construction crews.

Project Manager; Ten Mile Canal Filter Marsh Project, Lee County—Design, permitting, and construction management of a canal-side stormwater quality improvement project for Lee County. Project will divert flow from an approximately 11-square-mile urbanized drainage basin for treatment prior to discharge into Estero Bay.

Project Manager; Research Facility, Wright Construction Group—Site design and local and state permitting for Seminis' 20-acre agricultural research facility in Hendry County, Florida.

Project Manager; Billy Creek Filter Marsh Phase I, Exotic Removal, City of Fort Myers—Provided project oversight during the clearing of the exotic monoculture from the 56-acre site preserving viable clusters of native vegetation. The project was then redesigned to integrate the preserved areas of mature oaks, maples and hickories into the treatment and recreational trails system.

Project Manager; Bunche Beach Improvements, Lee County Parks & Recreation Department—Provided site design and permitting services for development of a County-owned inland island for use as a recreational amenity including docks, boardwalks, restroom facilities, and parking.

Project Manager; Ortiz Avenue Bridge Hydraulics Report, Aim Engineering & Surveying, Inc.—Provided subconsulting services to provide complete bridge hydraulics report per Florida Department of Transportation standards for Lee County Department of Transportation project.



BRADLEY S. VANCE, P.E.
Senior Engineer I

Project Assignment: Stormwater Engineering

Education

B.S., Civil Engineering—
Louisiana State University,
1984

Years with ECT—4
Other Firms—22

Registrations

Professional Engineer, Florida,
No. 43746
Professional Engineer, Louisiana,
No. 23273
FDEP Qualified Stormwater Man-
agement Inspector, No. 8794

Affiliations

Member, Association of State
Floodplain Managers
Member, Florida Floodplain Man-
agers Association
Member and Past President, Fort
Myers Kiwanis Club

Areas of Specialization

Flood Insurance Study (FEMA),
Letters of Map Revisions
(LOMR), and Physical Map
Revisions (PMR); Hydrologic and
Hydraulic Evaluations and
Analysis; Stormwater
Quantity/Quality Systems Design,
Permitting, Operations, and
Management; NPDES Pollution
Prevention System Design and
Inspection

Project Engineer; Stormwater Master Plan Update, City of Fort Myers—Technical and responsible charge for the preparation of a stormwater master plan for the City of Fort Myers to include a 5-year capital improvement program and funding mechanisms, systemwide modeling using SWMM, comprehensive water quality analysis and modeling, developed level of service criteria for quantity and quality, inventory of permitted municipal facilities and obligations, NPDES/TMDL program evaluation, and development of a geographic information system ArcHydro geodatabase.

Project Engineer; Dean Park Hazard Mitigation Grant Program (HMGP), City of Fort Myers—Technical and responsible charge for the preparation of the engineering design report and construction plans, including extensive hydrologic and hydraulic system analysis using SWMM, stormwater pumping station capacity upgrades, environmental permitting through the SFWMD and USACE, development of frequency-depth-damage relationships, benefit-cost analysis, easement acquisitions, and estimated construction and operational costs.

Project Engineer; FEMA Flood Insurance Restudy, Lee County—Technical and responsible charge for the methodology and scope development, including modeling input parameters, specified return intervals, datum conversion, and limits of the detailed study for a countywide restudy.

Project Engineer; FEMA Flood Insurance Restudy, Lee County—Technical and responsible charge for the methodology and scope development, including modeling input parameters, specified return intervals, datum conversion, and limits of the detailed study for a countywide restudy.

Project Engineer; Allen Court Stormwater Improvements, City of Fort Myers—Technical and responsible charge for the design and environmental permitting (exemption) for localized drainage and water quality improvements for a circa 1960s relatively intense, pre-regulatory subdivision in Fort Myers, Florida.

Project Engineer; Carrell Canal Water Quality Improvements, City of Fort Myers—Technical and responsible charge for the engineering design, environmental functioning, and regulatory permitting through the SFWMD for an integrated stormwater filter marsh facility within the Fort Myers Country Club golf course. Project treats offsite flows and included water control structures, wetlands and marsh creation, irrigation system modifications, conjunctive re-grading, and landscape planting features.

Project Engineer; Billy Creek Filter Marsh Park, City of Fort Myers—Technical and responsible charge for the design and environmental resource permitting of a 55-acre multi-use stormwater quality treatment facility to include an open water body, a vegetative flow-way, cypress wetland and habitat restoration, water level control structures, pedestrian pathways, and environmental interpretive features. Project represents an interagency cooperative between the City

of Fort Myers, Lee County 2020, City of Fort Myers - Housing Authority, and the SFWMD.

Project Engineer; Manuel's Branch East and West Weirs, City of Fort Myers—Technical and responsible charge for the design and environmental permitting thru the SFWMD and USACE, and construction inspection for two interdependent and operational water control structures within an existing canal right-of-way.

Project Engineer; Manuel's Branch Siltation Structure, City of Fort Myers—Technical and responsible charge for the design and environmental permitting thru SFWMD and USACE for a siltation and pollution reduction structure located within a man-altered waterway. Required integration of planted littoral zones, channel rehabilitation, and bank stabilization.

Project Engineer; Ten Mile Canal Linear Bike Path, Phase III; Lee County—Technical and responsible charge for the design and environmental permitting thru the SFWMD and USACE, and construction observation for a 3-mile segment of a multi-phased bike path and stormwater management facilities along the overbank of an existing canal.

Project Engineer; Ford Street Canal Filter Marsh, City of Fort Myers—Technical and responsible charge for the design and environmental resource permitting of a 10-acre stormwater quality treatment facility including water level control structures, wetlands, and habitat restoration.

Project Engineer; Numerous Countywide Stormwater Projects, Lee County—Technical and responsible charge for the design, environmental permitting, and construction inspection for numerous capital improvement projects for localized drainage and water quality improvements, water control structures, and natural systems restoration and enhancements.

Project Engineer; Numerous Countywide Projects, Lee County—Technical and responsible charge for the design, permitting, and construction of numerous capital improvement projects on a countywide basis involving systemwide localized drainage improvements, natural systems restoration/enhancements, and water control structures.

Engineering Manager; Lee County Natural Resources Management Division—Program manager and supervisor for the surface water section. Managed and coordinated water resources related issues for public works, private zoning, and site development projects. Provided management oversight for development of stormwater master plans for multiple watersheds assigned to local consultants. Assisted in the development of County policies, criteria, and procedures. Responsible for application, implementation, coordination, and compliance with federally and state funded projects, including Federal Emergency Management Agency (FEMA)/HMGP, Community Development Block Grant, Natural Resources Conservation Service, SFWMD, and Community Budget Issue Request programs.



STEVEN G. DANSKINE, P.E.

Staff Engineer I

Project Assignment: Stormwater Engineering

Education

B.S., Environmental Engineering—University of Florida, 1997

Years with ECT—6

Other Firms—8

Registrations

Professional Engineer (Civil), Florida, No. 62496

OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and 8-hour annual refresher

Affiliations

Florida Engineering Society
Daytona Chapter Officer

Areas of Specialization

Site Engineering Design (grading, drainage, paving), Stormwater Management System Design, Flood Mitigation, Water and Sanitary Sewer System Design Permitting, and Construction Administration

Project Engineer; Lake Gibson Southwest Drainage Basin Watershed Management Plan, City of Lakeland—Assisted in preparing a watershed management plan for the Southwest Basin of Lake Gibson in accordance with the SWFWMD's guidelines and specifications. The project included developing a GIS database for the basin that includes inventoried structures, updated land use, soils, digital terrain model, 100 and 500-year floodplain mapping, and the basin junction-reach network. The watershed management plan included preparing a watershed evaluation plan, floodplain analysis, surface water assessment, and a BMPs alternative plan.

Project Manager; Central Beach Flood Mitigation Phase II, City of New Smyrna Beach—Responsible for design of roadway, water, and sewer utilities replacement and stormwater collection system for a 6 square-block-area in the Central Beach area of New Smyrna Beach, Florida. This \$2.2 million project consists of shell road reconstruction, inlets, piping, and stormwater vaults, and exfiltration with pretreatment prior to pumping. Other project tasks include plan and specifications generation, bidding assistance, and construction phase services.

Project Manager; Second Street South Baffle Box, City of Cocoa Beach—Responsible for the stormwater quality monitoring for the Second Street South Baffle Box which is a Suntree Design second generation baffle box for nutrient removal prior to discharge to the Banana River Lagoon. The study monitored nutrients with respect to grain size, and is utilized by the 319(h) grant program by the EPA and FDEP for evaluation of this type of treatment device.

Project Manager; Fairmont, Westwood, North Flood Mitigation, City of New Smyrna Beach—Responsible for the design and permitting for flood mitigation of a 1-square-block area in New Smyrna Beach, Florida. The project requires evaluation of flooding, modeling, public presentation of options, and design and permitting of upgrades to the drainage system in this area.

Project Manager; Ocean Beach Boulevard Bio-Retention Project, City of Cocoa Beach—Responsible for the design and permitting for the stormwater treatment for a 1.5-mile stretch of Ocean Beach Boulevard. The project reconstructs the entire corridor, reducing paved surface; replaces raised medians with bioswales to provide for stormwater runoff treatment where none previously existed; and utilizes existing infrastructure to the maximum extent practicable. Requires coordination with landscape designer, roadway designer, City and Utility departments, and SJRWMD.

Project Manager; Beach Condominium, Private Developer—Responsible for design and permitting for site civil design and stormwater facilities for the development of a residential site in New Smyrna Beach, Florida. This project required that the stormwater treatment system meet the requirements of the FDEP and the City of New Smyrna Beach while meeting Coastal Construction Control requirements.

Project Manager; Smyrna Lofts, Private Developer—Responsible for design and permitting for civil site stormwater and utility facilities for the redevelopment of a commercial site in New Smyrna Beach, Florida. This project required that the stormwater treatment system meet the requirements of the SJRWMD and the City of New Smyrna Beach.

Project Manager; Baker Avenue and Connecticut Avenue Water Main Replacement, City of Lake Helen—Responsible for the design and permitting for the replacement of 2,700 linear feet of water main, fire hydrants, and water services in the City of Lake Helen, Florida.

Project Engineer; B-23 Canal, Quentin L. Hampton & Associates, Inc.—Phase I stormwater monitoring, analysis of water samples, and analysis for effectiveness of stormwater improvements in the City of Port Orange, Florida.

Project Manager; A-1-A Reuse and Water Main Replacement Project, City of Ormond Beach—Responsible for the design, permitting and construction management of 4-inch reuse main and 12-inch water main along A-1-A in Ormond Beach, Florida. The 12-inch water main replaced an aging 4-inch water main serving numerous condominiums and business along nearly 1 mile of this utility congested right-of-way. This project required extensive coordination with permitting agencies, operations personnel, and customers during both the design and construction phases in order to minimize adverse impacts. It also included one 80-foot jack and bore crossing of the roadway.

Project Manager; S. Summit Avenue Improvement Project, City of Lake Helen—Responsible for the design, permitting, plans, and specifications of this Community Development Block Grant (CDBG)-funded project for improvement of approximately 1900 lf of this residential roadway. The existing dirt road was in dilapidated condition, and this multi-phased project incorporated all aspects of stabilization, stormwater treatment, and utility infrastructure to improve this neighborhood.

Project Engineer; Odessa Power Plant Evaporation Pond, Navasota—Responsible for construction phase services during construction of a 40-acre evaporation pond for the Odessa Power Plant in Odessa, Texas.

Project Manager; Potable Water Wells Replacement, Seminole Electric Cooperative, Inc. (SECI)—Responsible for the design and permitting for the replacement of three community potable water wells at the facility in Palatka, Florida. Includes substantial testing and monitoring services to comply with Department of Health and FDEP requirements.

Project Manager; Site Plan Review Services, City of Lake Helen—As the contracted City Engineer for the City of Lake Helen, these services include the site plan review of commercial and subdivision projects for traffic, utility, and stormwater compliance with City Ordinances.



DOMENICK M. TUFARIELLO, P.E.

Senior Engineer I

Project Assignment: Stormwater Engineering

Project Manager/Engineer of Record; Sweetwater Creek Floodplain Analysis Update, Hillsborough County—Responsible for completing hydrologic and hydraulic modeling, which included updating watershed parameters, revising basin delineations, time of concentration calculations, field investigation, data collection, level of service analysis, and calibration and verification to historical rainfall data at Sweetwater Creek in Hillsborough County, Florida. Updated additional duties included preparation of the project management plan and stormwater master plan. SWMM 4.3.1 version used.

Education

B.S., Civil Engineering —
University of Florida, 1996

Years with ECT—4
Other Firms—11

Registrations

Professional Engineer, Florida,
No. 56907

Affiliations

ASCE—American Society of
Civil Engineers

Areas of Specialization

Water Resource Engineering
(public and private), Regional
Stormwater Management
Planning, Watershed Hydrology,
Design and Management of
Stormwater Facilities, Wetland
Rehydration, Site Development,
Civil Design, Hydrologic and
Hydraulic Modeling, Permitting,
Construction Plan Review,
Construction Observation

Engineer-of-Record; District-Wide NPDES Program, FDOT, District 2—Responsible for the work order with FDOT to inspect approximately 900 stormwater systems for District wide NPDES compliance. An independent inspection program was developed on a hand-held computer to facilitate the field inspection activities and data collection effort. As a result we were able to eliminate manual data entry and migrate the inspection data seamlessly from the hand-held computer to the mother program.

Other tasks included performing an engineering evaluation (study) for the retrofitting of existing stormwater facilities to bring the project into compliance with the SJRWMD stormwater regulations. The engineering study on US-1 and SR 312 included evaluation and corrective action recommendation report for the stormwater facility, redesign of the facility, permit modification, construction plan preparation, cost estimates and special provisions for specifications. A second project was generated for the SR 26 ponds, and included an evaluation and corrective action recommendation report for the stormwater facility, with redesign, permit modification, construction plan preparation, cost estimates and special provisions for specifications. The two roadway drainage ponds did not function as designed. Proposed solutions included bleed down devices, excavation to lime rock, applying sand filters, and stormwater pumping.

Project Engineer; Tampa Bay Water Phase I Mitigation Plan, Tampa Bay Water—Responsible for identifying potential surface water drainage modification within the vicinity of various well fields to restore or improve flow to candidate sites in Hillsborough County, Florida. Retrofit improvements consisted of placement of culverts under roadways, ditch blocks, and modifications to existing control structures. Additional duties included developing conceptual designs to address wetland rehydration needs, estimating water volumes and rates, identifying permit requirements, cost estimates, and develop project implementation schedules.

Project Manager; Alligator Creek Implementation Project, City of Clearwater—Responsible for both the hydrologic and hydraulic modeling and design of an inline sediment sump to trap particles prior to reaching Cliff Stephens Lake in Pinellas County, Florida. The project presented many design challenges, as the discharge from the main channel of the Alligator Creek watershed and a tributary ditch (Channel G) flowed directly into sump, and high flow conditions needed to be considered. Major design, maintenance, and

constructability issues were involved. SWMM version 4.31 was used to model the overall watershed and design all proposed improvements.

Project Manager; Civil Site Developments, Numerous Clients—Managed complex civil/environmental projects from planning through design, permitting and construction throughout Florida. Project sizes range from less than 1 acre to over 100 square miles, and include stormwater master plans and permitting for retail, commercial, residential, multi-use, and many others.

Project Manager; Debel Road Drainage Improvements Project, Hillsborough County—Responsible for generating the project deliverables and assuring their quality. Project consisted of preparation of project development report (PDR), ICPR modeling, plans and specifications, obtaining necessary permits, and identifying all land requirements in Hillsborough County, Florida. The project allowed for the enhancement of a cross drain under Debel Road, in the Sweetwater Creek Watershed. The primary objective was to analyze recommendations made in the previous studies(s), implement the PDR permitting, final design, and construction.

Project Manager; South Oaks Drainage Project, Marion County—Developed master plan to address flooding issues within the Marion County watershed. Improvements to existing system were required; the modeling was completed using 4.31 version of SWMM.

Project Manager; Leonard Avenue Drainage Improvements Project, Hillsborough County—Responsible for the completion of hydrologic and hydraulic modeling analysis of a Hillsborough County Watershed using ICPR. Watershed parameters were generated; field verification and data collection were performed to ensure accuracy of results. Construction plans with roadway improvements were generated.

Project Manager; Lake St. Charles Master Plan, Polk County—Responsible for developing a stormwater master plan to address flooding within watershed in Polk County, Florida. Alternative solutions were developed and considered using the ICPR and StormCAD software.

Project Manager; Christina Boulevard and Vicinity Drainage Improvement Project, Polk County—Responsible for the completion and development of a stormwater master plan to address flooding upstream of Christina Boulevard in Polk County, Florida. Completion of the project included design improvements to the existing system, construction plans were generated, and all drainage infrastructure was sized using ICPR and StormCAD software.

Project Manager; Timberland Drainage Improvements Project, Hillsborough County—Responsible for the completion of hydrologic and hydraulic modeling analysis of the Rocky/Brush Creek Watershed for Hillsborough County using EPA SWMM Version 4.31. The design improvements consisted of multiple pond sizing, BMP implementation, structure design, and environmental resource permitting.



STEVEN C. PROVOST, P.E.
Principal Engineer

Project Assignment: Stormwater Engineering

Education

M.S., Transportation and Traffic
Engineering—University of
California-Berkeley, 1965
B.S.C.E., Civil Engineering—
University of Connecticut, 1964

Years with ECT—9

Other Firms—38

Registrations

Professional Engineer (Civil),
Florida, No. 19173

Affiliations

Chi Epsilon, Civil and Environ-
mental Engineering Honor So-
ciety
Florida Engineering Society, Na-
tional Society of Professional
Engineers
American Society of Civil Engi-
neers
Institute of Transportation Engi-
neers

Areas of Specialization

Project Management, Multi-firm
Team Management, Engineering
Feasibility Studies, Site Engineer-
ing Design (grading, drainage,
paving), Water and Sanitary Sewer
System Design and Permitting,
Dredging and Water Use Support
Facility Design (boat ramps,
docks, piers) and Permitting, Con-
struction Cost Estimating, Con-
struction Administration, Grant
Applications, and Grant Manage-
ment

Project Manager; Sports Complex Expansion, City of New Smyrna Beach, Florida—Responsible for the planning, design and permitting for the four-phase expansion/renovation of the city's existing Sports Complex which serves the community-at-large as well as provides facilities for the New Smyrna Beach High School home games. The initial phase replaced two small poorly lighted baseball fields with one high school scale baseball field with state-of the-art lighting. The second \$2M+ phase added approximately 25 acres to the complex by incorporating an adjacent construction material land-fill. This phase included the addition of dugouts for the Phase one baseball field plus the addition of three soccer fields, a multi-purpose field and three softball fields. The \$3M+ third phase, completed in early 2004, included the replacement of the existing 2,000-seat football stadium with a 4,000-seat facility having a new football field and surrounding 400-meter rubberized track, home and visitor concessions, restroom, and locker buildings. The last phase, now under construction, will be the complete renovation of the four Little League scale baseball fields with new graded fields, irrigation, sports field lighting, dugouts, and a 2-story central pavilion with an open-sided lower floor and second level for the scorekeepers. Activities included coordinating architecture/planning/ electrical engineering support consultants, master plan and facility program preparation, onsite utility system design and permitting, sports field lighting plan coordination, grant preparation assistance, and construction administration coordination.

Project Manager; P.F.C. Emory L. Bennett Park, County of Volusia, Florida—Coordinated engineering services in association with a planning consultant for the development of a major county park. Activities included coordination of the design of the sports field grading plans, interior street system and parking lot plans, stormwater management system, and site utilities; assistance with the site plan submittal and review committee presentation; permitting; and project reviews during construction.

Project Manager; Buena Vista Park Reconstruction, City of New Smyrna Beach, Florida—Coordinated an architecture / planning/ engineering team for the planning, design, and permitting of the reconstruction of an existing park located adjacent to the Intra-coastal Waterway. Activities included coordination of the master planning and presentation of the plan alternatives to the public and elected officials; assistance with preparation of construction fund grant application; coordination with FDOT to obtain agreement to use FDOT right-of-way, coordination of site engineering, site lighting, restroom building, and landscape plan preparation; preparation of construction plans and permitting for fishing pier and shore edge rip rapping; construction cost estimating; bidding assistance; and project reviews during construction.

Project Manager; Cory Estates Canal Dredging Feasibility Study, County of Volusia, Florida—Responsible for completing a study for the dredging of a "finger canal" off the Indian River that was constructed when the subdivision was developed in the early 1960s. The results of the study will be presented to the residents adjacent to the canal to determine whether they will support the forma-

tion of a Special Assessment District to fund the cost of the dredging. Activities included collecting samples of the bottom sediments for physical and chemical analysis, estimating the quantity of material to be dredged, determining a location for the disposal of the dredged material and preparing a project cost estimate.

Project Manager; Ponce Inlet Side Channel Dredging, County of Volusia, Florida—Responsible of the planning, design and permitting for the maintenance dredging of a navigation channel off of the main channel between the Ocean to the Intracoastal Waterway at Ponce deLeon Inlet. The channel services a Volusia County public boat ramp, a marina used by ocean fishing charter boats, a commercial boat repair business and several residences. Activities included coordinating the collection of samples of the material to be dredged for physical and chemical analysis, development of a dredging plan and an estimate of the quantity of material to be dredged, determination of a site for the disposition of the dredge spoil, preparation of a project cost estimate, and assisting the County during bidding and construction.

Project Director; Site Engineering for Replacement of Three Fire Stations, City of New Smyrna Beach, Florida—Assisted with site evaluation, site engineering, and related activities for the replacement of the city's main station and two satellite stations. Activities for this project, which is in progress, include assistance with the evaluation of alternative sites, coordination of site surveys and geotechnical investigations, coordination of site engineering design, permitting, construction cost estimating, bidding assistance, and periodic project reviews during construction. Currently one fire station, which will also serve as the city's Emergency Operation Center, has been completed and the other two are in early design[2009—>\$65,000].

Project Director; City Marina Rehabilitation, City of New Smyrna Beach, Florida—Coordinated the architecture/engineering team for the planning, design, and permitting for the demolition and replacement of the existing marina slips, utilities, dockmaster/restroom building, and related bulkhead. Activities for this project, which is under construction, will include existing condition documentation, coordinating preparation of the replacement marina alternative concepts, coordinating a construction grant application, presenting the recommended plan to the public and elected officials, preparation of FDEP permit application, coordination of the preparation of the submerged land lease, design of utilities for the marina, coordinating preparation of construction documents, bidding assistance, and project reviews during construction.

Project Manager; Gabordy Canal Pedestrian Bridge, City of Edgewater/City of New Smyrna Beach—Coordinated the design and permitting of pedestrian bridge over Gabordy Canal that is located on the boundary between Edgewater and New Smyrna Beach, Florida. The bridge will connect existing sidewalks. Activities for this project included preparation of a report describing alternative bridge concepts; coordination of the design, permitting, and technical specifications for the selected bridge alternative; preparation of bid documents; and a final review of the completed bridge.



ANIRUDDHA GUHA
Senior Associate Engineer I
Project Assignment: Stormwater Engineering

Education

M.S., Geology/Hydrology—
University of South Carolina,
2002
M.S., Applied Geology—Indian
Institute of Technology,
Bombay, 1998
B.S., Geology, University of
Calcutta, India, 1996

Years with ECT—3
Other Firms—7

Areas of Specialization

Hydrological and Hydraulic
Modeling, Fluid Dynamics, Land
Surface Hydrology, Open Channel
Hydraulics, Groundwater
Hydrology, Wetland Hydrology
and Chemistry, Fundamentals of
GIS and GIS-Based Modeling,
Digital Techniques in Remote
Sensing, Statistical Methods in
Hydrology, Numerical Analysis,
Computer Applications in Civil
Engineering

Project Engineer; Cardinal Lane Watershed Management Plan, SWFWMD—Responsible for database management, data collection, ERP analysis, digital terrain model (DTM) preparation, geographic information system (GIS) modeling, hydraulics and hydrology (H&H) modeling, floodplain delineations, and other aspects of preparing a watershed management plan.

Project Engineer; B-21 Watershed Management Plan, Volusia County—Responsible for database management, data collection, ERP analysis, DTM preparation, GIS modeling, H&H modeling using ICPR, floodplain delineations, flood mitigation planning, conceptual design of mitigation strategies, and report preparation.

Project Engineer; Depot Avenue Stormwater Park, City of Gainesville—Responsible for development of a SWMM model for an urban watershed in downtown Gainesville, Florida.

Project Manager; Isleboro Area Drainage Study, New Smyrna Beach—Responsible for database management, data collection, ERP analysis, DTM preparation, GIS modeling, H&H modeling using ICPR, floodplain delineations, flood mitigation planning, conceptual design of mitigation strategies, and report preparation.

Project Engineer; Watershed Management Plan Review, SWFWMD—Responsible for review of watershed management plans, providing supporting materials for public meetings, and GIS data support.

Project Engineer; Dewatering Study, Confidential Client—Responsible for groundwater mound analysis for a dewatering project for large tourist attraction in central Florida.

Project Engineer; Mill Creek Streambank Improvement, Huron River Watershed Council—Responsible for development of a HEC-RAS model and GIS support for a stream restoration project in Washtenaw County, Michigan.

Research Assistant, University of Florida—Responsible for:

- Hydrological modeling of wetland, shallow water and reservoir systems, and model evaluation for estimation of evapotranspiration and water and energy balances.
- Hydrological and environmental modeling using a GIS-based tool (SWAT 2000) for estimation of fertilizer runoffs.
- Validation of model-simulated soil moisture with satellite and airborne remote sensing sensors derived soil moisture over the Suwannee River Basin in Georgia.
- Design of a GIS-based framework for coupling remote sensing-based land surface hydrological parameters with meteorological forcings for calibration of a large scale hydrological model.
- Developed input parameters for a GIS-based water allocation system for irrigation purposes.



DARREN L. STOWE, AICP, LEP
Principal Scientist
Project Assignment: Planning

Education

B.S., Biology—Cornell University, 1975

Graduate Study, Urban and Regional Planning—Florida State University, 1990

Years with ECT—15

Other Firms—16

Registrations

American Institute of Certified Planners

Certified Florida Environmental Assessor

INSTEP Licensed Environmental Professional, No. 348

Affiliations

Florida Environmental Assessors Association (past president)

SunCoast Chapter of American Planning Association

Areas of Specialization

Phase I/II Environmental Site Assessments and Other Due Diligence Investigations, Peer Review, Planning and Socioeconomic Aspects of Site Certification Applications and Certificate of Public Convenience and Necessity Applications, Comprehensive Plan Amendments, Expert Witness for Land Use and Socioeconomics

Project Planner; Phase I ESA, Sargent & Lundy—Due diligence investigations of an approximately 3,200-acre property in Taylor County, Florida, proposed for development by the Florida Municipal Power Authority as a solid fuel power plant. Prepared a comprehensive plan text amendment and amendment to the Future Land Use Map. Provided oversight of subcontractors for roadway/railroad alternatives and archaeological/historical resource surveys. Prepared land use and socioeconomic portions of SCA.

Project Planner, Smith Unit 3 SCA, Gulf Power—Completed the land use and socioeconomic background study and impact analysis sections of the application for siting a 550-MW natural gas fired electrical generating plant in Bay County, Florida. Prepared documentation to support an amendment to the Future Land Use map of Bay County from an Agricultural to an Industrial designation.

Project Planner; Transmission Line Siting Act-Willow Oak to Davis, Tampa Electric Company (Tampa Electric)—Project planner and land use expert witness for a 30-mile, 230-kV transmission line through three different municipalities. Assisted in route selection and public outreach. Testified as a land use expert before the Florida Administrative Law Judge.

Project Planner; Phosphate Mining Land Use Approvals, Mosaic Fertilizer, L.L.C.—Reviewed applicable comprehensive plans and land development regulations for Hillsborough, Manatee, and Hardee Counties, Florida. Prepared land use documents and presented expert witness testimony in quasi-judicial proceedings.

Expert Witness; Land Use Planning, Multiple Clients—Presented expert witness testimony in support of mining ordinances in Lee and Citrus Counties and in support of phosphate mining projects in Hillsborough, Manatee, and Hardee Counties, Florida. Testimony included compliance with comprehensive plans (state, regional, and local) and consistency with local ordinances and land use codes.

Project Planner; Polk Power Station Unit 6, Tampa Electric—Prepared supporting documentation for a level 4 conditional use permit and the appropriate land use and socioeconomic sections of the SCA in support of a proposed 660-MW integrated coal gasification combined cycle (IGCC) electrical power generating plant in Polk County, Florida. The application also included new transmission lines requiring land use review.

Project Manager; Comprehensive Plan, City of Ocala—Responsible for reviewing City of Ocala's land use designations and zoning to update the comprehensive plan. The primary focus of the update was to review and incorporate policies related to protecting groundwater from contamination by hazardous wastes, identifying and protecting wetland areas, identifying and protecting threatened and endangered species and habitats, and the identification and delineation of karst-sensitive areas. The findings of the project were presented at a public hearing.

Project Manager; Development of Regional Impact (DRI) Services, Shimberg-Cross—Performed DRI services for the Fishhawk Ranch Development in Hillsborough County, Florida. Regulatory approvals were granted for the 5,000-acre primarily residential development, including gopher tortoise relocation plans and conservation easements.

Project Manager and Principal Planner, Land Management Plan, Hillsborough County—Prepared a land management plan to incorporate planned county facilities, including a regional wastewater treatment plant, a sludge treatment facility, a regional park with recreational facilities, a potential high school site, roadway infrastructure and wetlands restoration. Successfully obtained a conditional use permit for the proposed facilities in Hillsborough County, Florida.

Project Manager and Principal Planner; Cone Ranch Land Management Plan, Hillsborough County—Prepared a land management plan for a northeastern Hillsborough County tract proposed as a well-field. The plan investigated potential impact from an adjacent phosphate plant and reviewed potential revenue generating land uses.

Project Planner; Environmental Site Assessment, Southern Company Services—Project planner and land use expert for a proposed integrated gas combined cycle electrical power plant; a surface lignite coal mine; and linear facilities including a natural gas pipeline, transmission lines, and a pipeline for sequestered carbon dioxide in Kemper County, Mississippi. Responsible for preparation of the land use, socioeconomic, environmental justice, housing, and transportation sections of the Department of Energy's (DOE's) environmental impact statement.

Project Planner; Transmission Line Siting Act-Miami-Dade County, Florida Power & Light Company (FP&L)—Project planner and land use expert for approximately 140-miles of 500-kV and/or 230-kV transmission line through eight different municipalities. Assisted in route selection and public outreach. Prepared appropriate sections of Chapter 9 of the SCA for development of two new nuclear electrical generating units.

Project Planner; Transmission Line Siting Act-Morgan Road to Zephyrhills North, Progress Energy—Project planner and land use expert for a 40-mile, 230-kV transmission line through two different municipalities. Assisted in route selection.

Project Planner; Perryman Power Plant, Constellation Energy—Prepared the land use and socioeconomic sections of the certificate of public convenience and necessity (CPCN) application for additional simple cycle electrical generating turbines in Perryman, Maryland. Application included an analysis of potential visual impacts.

Project Planner; Maryland CPCN Environmental Review Document, Constellation Energy—Responsible for all land use and socioeconomic aspects of a simple cycle natural gas power plant expansion in Harford County.



AHMED SAID, Ph.D., P.E.
Senior Engineer I
Project Assignment: Modeling

Education

Ph.D., Civil and Environmental Engineering—Utah State University, 2003
M.S., Statistics—Cairo University (Egypt), 1994
M.S., Irrigation and Hydraulics Engineering—Cairo University (Egypt), 1998
B.S., Civil Engineering—Cairo University (Egypt), 1983

Years with ECT—3
Other Firms—20

Registrations

Professional Engineer, Idaho,
No. 13319

Affiliations

American Water Resources Association
American Water Works Association
American Society for Civil Engineers
Journal Reviewer, Journal of the American Water Resources Association
Journal Reviewer, Journal of Spatial Hydrology
Journal Reviewer, Environmental Monitoring and Assessment
Journal Reviewer, Environmental Management
Journal Reviewer, Ecological Economics

Areas of Specialization

Water Resources Engineering, Modeling, Hydrologic and Watershed Modeling, Modeling of Surface Water/Groundwater Interaction, Water Quality, Hydrodynamic Processes, Rainfall Interactions, Kinematic Overland Processes

Senior Engineer, SWFWMD—Responsible for surface/groundwater modeling, helping SWFWMD with special topics such as directly connected impervious areas, determining groundwater boundary conditions for regional modeling, modification of natural broad-crested weir coefficient, determining minimum level for lakes, estimating streamflow in the Peace River, and SWFWMD guidelines and specifications.

Assistant Professor and Geo-Spatial Outreach Coordinator; Boise Center Aerospace Laboratory, Idaho State University—Responsible integrating remote sensing and GIS technology into decision support systems, train irrigation district personnel in the use of remote sensing and GIS technology, and in the use of available data, as components of their decision support systems, Create an internet-based mechanism allowing all water-resource organizations readily to access each others' data, deliver remotely sensed data, such as Landsat ETM+ multi-spectral data, and value added remotely sensed data, such as Landsat-based evapotranspiration, over the internet, preparing reports and grant applications, and teaching statistics.

Post-Doc/Research Associate; Department of Civil and Environmental Engineering, University of South Florida—Responsible for modeling of surface and groundwater interactions, teaching hydraulics/water resources/advanced hydrologic models, preparing project reports and grant applications, and advising graduate students. Other projects included hydrologic modeling of ungauged streamflow in Charlotte Harbor for SWFWMD, comparing pre- with post-mining impacts on the Peace River, studying of the potential environmental impacts of a saltwater lake in the Sahara, and installation of soil moisture sensors at Taliaferro Research Park for Hillsborough County.

Research Assistant; Civil and Environmental Engineering Department, Utah State University and Idaho National Lab—Responsible for modeling water resources scarcity and build a Bayesian network Decision Support System for the Big Lost River, considered one of the important tributaries of the Snake River Plain, developing water quality index, and modeling of surface/groundwater interaction using MODFLOW and HSPF for the Snake River and Big Lost River in Idaho.

Deputy Project Director; National Water Resources Plan Project (Dutch Project) Egypt—Responsible for providing inputs for the water component of the National Investment Plans, creating strategic planning procedures within the government that enable an appropriate analysis of policies and investment for the Water Sector, managing a staff of 15 engineers for a major water resources engineering project sponsored by the Netherlands, preparing reports, reviewing reports, and managing all financial aspects of the project.

Manager of Technical Office; Ministry of Water Resources and Irrigation (MWRI), Egypt—Responsible for helping the decision makers by comprehensive studies about national projects, examining different scenarios for solving water resources problems, managing a staff of 23 engineers and other water resource personnel, preparing reports, and reviewing reports.



DOYLE E. COTTRELL, P.E.
Principal Engineer

Project Assignment: Construction Administration

Education

B.S., Civil Engineering—
Michigan State University, 1969

Years with ECT—14

Other Firms—26

Registrations

Professional Engineer, Florida,
No. PE0038188
Professional Engineer, Pennsylvania,
No. 02075-E
Professional Engineer, Louisiana,
No. E-22486
Professional Engineer, Maryland,
No. 20417

Areas of Specialization

Project Management, Remedial
Design and Construction Man-
agement, Environmental Com-
pliance Management Program
Development, Permitting Strategy
Development, Site Closures

Project Engineer; Oxbow Restoration, Henry Ford Museum & Greenfield Village and Wayne County—Developed a restoration plan to create designs to restore a historic river oxbow and provide habitat for both fish and wildlife. The project included the following tasks: topographic and bathymetric surveys, sediment analysis, wetland delineation and vegetative GIS mapping, modeling and hydroperiod analysis, development of design concepts and alternatives, development of restoration plan, conducting an environmental assessment, preparing plans and specifications, developing education programs, and preparing applications for permits. Also provided engineering oversight during the removal of sediments and restoration of the oxbow.

Chief Engineer, Newburgh Lake Restoration Project, Wayne County, Michigan—The Newburgh Lake Restoration project, part of the Rouge River National Wet Weather Demonstration Project, involved the excavation of 750,000 cubic yards of lake sediments, vegetation restoration, aquatic plant control, and fish habitat enhancement and stocking. Responsible for the oversight of all construction aspects of this project, as the owner's (Wayne County) resident engineer. In this role he was responsible for assuring that all construction activities were carried out in strict accordance with the contract specifications. This included daily oversight of all construction activities, providing technical support for resolution of all issues arising from unforeseen conditions, and monitoring project financial progress. Additionally, he was responsible for the proper manifesting of all sediments transported offsite, verifying that cleanup objectives are achieved, assuring that final lake bottom contours were attained, and that the structural stability of the lake shore and dam was maintained during the restoration project. This effort included the coordination of various technical support teams including sediment sampling, geotechnical testing, and surveying.

Cost and Schedule Engineer, \$200 Million Industrial Expansion, Aluminum Company of America—Responsible for the financial monitoring and project scheduling of this industrial expansion, reporting to the Construction Manager. This effort included the scheduling of all design, specification packages, and procurement, including equipment and materials. Monitoring included continuous review of project financial commitments, comparison to budgets, and monthly reporting of financial progress.

Construction Supervisor, Various Construction Projects—Responsible for the coordination of all activities related to the management and oversight of construction projects. These activities included design reviews for constructability, specification preparation, bidding support, contract management, and supervision of testing and inspection activities. Contracts were related primarily to general civil aspects such as earthmoving, demolition, blasting, and road and railroad construction.

Design Engineer; Landfill Closure, Alcoa—Designed multimedia caps for the closure of three different industrial landfills in Texas,

Pennsylvania, and Indiana. The caps included installation of artificial membrane linings and drainage systems to minimize water infiltration. The closure plan also included the design and installation of groundwater monitoring systems. Designed a leachate recovery system for an industrial landfill, an effort which resulted in the installation of a French drain system around the entire perimeter of the landfill. Leachate is collected by gravity flow to a series of collection sumps.

Construction Supervisor; Alcoa—Responsible for construction supervision at various industrial construction project sites throughout the United States. Responsibilities included specification preparation, cost and schedule control, and contract administration for various contracts including earthmoving, foundations, structural steel, superstructure covering, and HVAC installation.

Project Director; RCRA Compliance, Design, and Permitting; Alcoa Industrial Chemicals—Project director for various RCRA compliance services for an industrial facility in Polk County, Florida. Activities included conducting an operational audit to assess environmental liabilities and management, operational, and environmental issues related to RCRA waste management; past and current disposal practices; and environmental compliance with respect to air, water, solid waste, hazardous waste, and spill prevention and control. Also directed development of a RCRA management plan which describes RCRA status and requirements; RCRA management structure; responsibilities of plant personnel; waste storage, handling, and management procedures; reporting and recordkeeping requirements; required inspections and inspection checklists; and RCRA training requirements. Also responsible for identification of requirements and revisions to the facility's contingency plan as necessary for RCRA compliance.

Project director for preparation of RCRA waste analysis plan and sampling plan for hazardous waste characterization of RCRA surface impoundment sludges. Directed engineering design and development of construction documents, plans, and specifications to increase capacity of existing surface impoundment. Phase II of the project involved design to double size the impoundment

Project Manager; Lake Bonnet Study, City of Lakeland—Responsible for comprehensive diagnostic study of Lake Bonnet, located in Lakeland, Florida. Diagnostic study indicated the lake is impacted by organic sediments, stormwater runoff, and groundwater discharge. Studies determined the extent of phosphorus concentrations and the total loading. Recommendations were prepared for BMPs.

Project Manager, Environmental Permitting, PEI—Responsible for obtaining all environmental permits required for a new, 1,000-MW, natural gas-fueled generating plant in Palm, Pennsylvania. Included are Title V air permits, Section 404, NPDES, and numerous Pennsylvania and local permits.



DAVID J. SANDERS, E.I.
Associate Engineer I

Project Assignment: Construction Administration

Project Engineer; Avenue C North Drainage Improvements, City of Carrabelle—Supported design and permitting services for retrofit of existing drainage infrastructure located in the City of Carrabelle, Florida. Project involves (1) replacement of an existing dry detention pond, previously permitted to serve a 7-acre drainage area, with a larger wet detention pond to treat runoff from a total contributing area comprising 27.5 acres; (2) replacement of an existing, sediment-filled cross-drain and provision of sediment removal features, with the improved cross-drain discharging to the new wet detention pond; and (3) stabilization of existing scour-prone areas to reduce erosion and sedimentation.

Education

B.S., Civil Engineering—Florida
State University, 2009

Years with ECT—3
Other Firms—0

Registrations

Engineering Intern, Florida,
No. 1100013846

Areas of Specialization

Stormwater Design and Permitting, Construction Documents, Field Services, Petroleum Remediation Activities

Project Engineer; CR-30A Drainage Improvements, City of Carrabelle—Supported design and permitting services for replacement and hardening of a failing double 60-inch cross-drain, headwall and endwall system, stabilization of erosion prone areas and provision of a 1.5-foot high weir structure upstream from the cross-drains to maintain a quiescent pool for erosion control and sediment removal.

Project Engineer; New Planned Unit Development and Phase I Final Development Plan Design, Monticello Plantations, LLC—

Assisted civil engineering design team in development of design and permitting documentation for water, sewer, roadway, grading, and stormwater infrastructure in the 115-acre first phase of a new 421-acre single-family detached housing residential planned unit development in Monticello, Florida. Development includes 133 residential units, common area parks, and walking/cycling trails.

Project Engineer; Engineering and Permitting Services for Domestic Wastewater Treatment Facility, Capital City Travel Center—

Supported engineering consulting and permitting services for a privately owned extended aeration activated sludge domestic wastewater treatment and reuse system with two rapid infiltration basins in Lloyd, Florida. Assisted in preparation of application and associated documentation for permit renewal at a permitted capacity of 0.0175 MGD.

Technical Support; ERP Program Support, NFWMD—

Assisted project team with completeness reviews of approximately 30 stormwater ERP applications by performing ground-truthing site inspections and technical reviews of construction plans and specifications, stormwater design calculations, and related documentation.

Field Supervisor; Rhoden Cove Ecological Restoration, Leon County—

Supervised field activities for a large ecological restoration, which included the eradication of non-native invasive plant species and the reintroduction of more native species around the Lake Jackson area.

Technical Support; Hopkins Copper Study—

Collection of water samples from the City of Tallahassee's Hopkins power plant discharge stream for trace copper analysis.



CHANG-XING JIN, Ph.D., P.E.
Staff Engineer II

Project Assignment: Water Quality, TMDL Technical Support

Education

Ph.D., Water Resource Engineering—Xi-an University of Technology (China)/University of Galway (Ireland), 1991
M.S., Computer Engineering—University of Minnesota, 2003
M.S., Water Resource Engineering—Xi-an University of Technology (China), 1986
B.S., Water Resource Engineering—Xi-an University of Technology (China), 1983

Years with ECT—3

Other Firms—16

Registrations

Professional Engineer, Florida,
No. 65622

Areas of Specialization

Project Management, Water Resource Engineering, Stormwater Modeling, Floodplain Studies, Water Quality Monitoring/Analysis, Sediment Transport, QA/QC of Hydraulic Systems, ArcView/ArcGIS in Water Resources, Database Development

Project Manager; Flow Data Analysis and Rating Improvement for Spillway, SFWMD—This project includes analysis of flow data at District structures, analysis of different flow computation method, rating improvement and development, and pre- and post- processing Computational Fluid Dynamic analysis.

Project Manager; Science and Technical Services Engineering and Data Processing Quality Assurance/Quality Control (QA/QC), SFWMD—Provide data QA/QC for SFWMD hydrology and hydraulics department.

Project Engineer; Depot Park Design Phase 2 Modeling, City of Gainesville—Provided modeling service using SWMM model to simulate the flow, stage, and flow velocity for the designed flow ways.

Project Engineer; Draa Field Stormwater Improvement, City of Titusville—Provide watershed delineation and model (ICPR) review.

Project Engineer; East Shores Water Quality Monitoring, City of Edgewater—Provide technical writing for quality assurance project plan (QAPP).

Project Engineer; Water Quality Monitoring for B-23 Canal Project, Port Orange—Provided data analysis and prepared final report on results.

Project Engineer; Cardinal Lane Watershed Management Plan, SWFWMD—Services provided included field reconnaissance, data collection and analysis, LiDAR data processing, using ArcGIS and ArcHydro technology in watershed delineation, water resources and water quality analysis, GWIS (Geographic Watershed Information System) database development, data QA/QC, ICPR model development, model result analysis, presentation preparations, etc.

Project Engineer; B21 Watershed Management Plan, Volusia County—Services included field data collection, LiDAR data processing, using ArcGIS and ArcHydro technology in watershed delineation, model development (parameter determination, calibration, and validation), model result analysis, alternative improvements study, preparation meeting presentation, and final report writing, etc.

Project Engineer; Isleboro Drainage Study, City of New Smyrna Beach—Efforts included model development (parameter determination, model calibration, and verification), model result analysis, alternative improvements study, and final report writing.

Project Engineer; 27th Avenue Stormwater Retrofit Monitoring, City of New Smyrna Beach—Responsibilities included QAPP preparation and application, equipment set up, data analysis, and final report writing

Project Engineer; Cambridge Basin Stormwater Management System Monitoring, Quentin Hampton & Associates—Efforts in-

cluded QAPP preparation and application, data analysis and presentation, and final report writing for the project in Port Orange, Florida.

Project Engineer; Lake Jesup Stormwater Monitoring, Seminole County—Efforts included collecting monitoring samples at seven stations in Lake Jesup. Completed data analysis and presentation, progress monitoring, and annual report writing.

Staff Engineer; 2nd Street Baffle Box, City of Cocoa Beach—Conducted data analysis and completed final report writing.

Project Manager; Stream Gauging Data, SFWMD—Assisted with the collection and analysis of stream gauge data, including QA/QC, and flow rating development.

Project Manager; Hydraulic Data QA/QC, SFWMD—Provided QA/QC on the hydraulic data obtained for stormwater treatment areas (STAs) proposed for remediation and inclusion in the Comprehensive Everglades Restoration Plan.

Project Manager; Flow Data Systems, SFWMD—Reviewed, analyzed, and implemented changes to improve flow measurement data reliability at STAs and other District structures in South Florida.

Project Manager; Groundwater QA/QC, SFWMD—Responsible for QA/QC review of groundwater data in the SFWMD database system. This database contains all the groundwater data collected by SFWMD. The analysis includes error identification, data reliability analysis, trend analysis, etc.

Project Supervisor; Stream Gauging, SFWMD—Supervised technicians in collecting stream gauge data at various District structures.

Project Manager/Engineer, FLOW Program, SFWMD—FLOW program is an important internal program to calculate flow for spillways, culverts, weirs, and pump stations. SFWMD maintains more than 500 such structures. This project reviewed and evaluated current FLOW program and re-developed a new algorithm for calculating flow for spillways, culverts, weirs, and pump stations. The work included coordinating with District project managers/engineers in charge of different structures, data collection, and programming. Several district databases were used and a C++ program was developed.

Project Engineer; Sediment Total Maximum Daily Load (TMDL), Oklahoma Environmental Commission—Developed a protocol for sediment TMDL determination on rivers/streams in Oklahoma.

ANNETTE DeMARIA, P.E.
Senior Engineer I

Project Assignment: Water Quality, TMDL Technical Support

Education

B.S., Environmental Health—
Oakland University, 1995
B.S., Chemical Engineering—
Wayne State University, 2000

Years with ECT—12
Other Firms—5

Registrations

Professional Engineer, Michigan.
No. 6201056031
OSHA 40-hour and 8-hour re-
freshers HAZWOPER training
Certified Soil Erosion Sedimenta-
tion Control Supervisor, Michi-
gan
Certified Confined Space Entry
Supervisor, Entrant, and Atten-
dant
Certified Industrial Stormwater
Operator, Michigan
Certified Construction Stormwater
Operator, Michigan

Areas of Specialization

Watershed and Stormwater Man-
agement, Illicit Discharge Detec-
tion, Grant Preparation, Sediment
Studies/Removal, Construction
Management; Storm and Surface
Water Sampling, Monitoring and
Data Collection and Interpretation

Project Manager; *E. coli* TMDL Development for portions of the Mississippi and Des Moines Rivers, EPA/RTI International Inc.—Overseeing the development of two TMDL reports for the specified water bodies. This includes gathering and analyzing background data including water quality, NPDES permits, land use, population and discharge data, interpretation of Load Duration Curve (LDC) and Bacterial Indicator Tool (BIT) modeling results, and preparing the text for both TMDLs.

Project Manager; *E. coli* TMDL Development for Illinois' Lake Michigan Beaches Phase 1: Work Plan Development, EPA/RTI International Inc.—Developing a work plan to address the *E. coli* impairments at 51 Lake Michigan shoreline segments. This involves meeting with local and state agencies to understand the sources/causes of the impairments, to discuss the modeling approach recommended by the prime contractor, to determine how the segments will be grouped for the TMDLs, and to gain local buy-in for the TMDL approach.

Project Manager; *E. coli* Monitoring and TMDL Development for the Detroit River and Ecorse Creek, EPA/RTI International Inc.—Prepared two *E. coli* TMDL reports for specified water bodies under prime contractor, RTI International. This included a summary of existing conditions, an *E. coli* source assessment, loading capacity calculations using LDC approach, load allocations, quality assurance reviews and presented at several stakeholder meetings. Also oversaw the stream monitoring effort, which focused on gathering and analyzing water quality (*E. coli* and bacterial source tracking) data to support the two TMDLs. Data collection efforts included grab sampling at 10 road/stream crossings on the Creek and at 9 cross sections on the River for a total of 80 monitoring sites. Performed data interpretation and prepared an interim monitoring report highlighting compliance with Michigan water quality standards.

Project Manager; *E. coli* Monitoring and TMDL Development for the St. Clair and Black Rivers, EPA/RTI International Inc.—Prepared an *E. coli* TMDL report for the Black River under prime contractor, RTI International. This included a summary of existing conditions, an *E. coli* source assessment, loading capacity and load allocations calculations using LDC approach, preparation of an implementation plan, and presented at several stakeholder meetings. Also oversaw the stream monitoring effort on the St. Clair and Black Rivers which focused on gathering and analyzing water quality (*E. coli* and bacterial source tracking) data to support a subsequent TMDL report.

Project Manager; TSS and Flow Monitoring on Detroit River Tributaries to Support TMDL Development, EPA/RTI International Inc.—Oversaw a stream monitoring effort that was focused on gathering water quality and quantity data to support a biota TMDL for three tributaries of the Detroit River (Frank and Poet Drain, Brownstown Creek, Marsh Creek, Tonquish Creek and Bishop Creek). Data collection efforts included hourly sampling for TSS and flow monitoring during both base flow and storm event conditions at

14 sites. Event mean concentrations and pollutant loadings were calculated for TSS and summarized in a project report to EPA and MDNRE. The MDNRE subsequently developed a TMDL for the streams.

Project Manager; 10 Mile Drain PCB Investigation, Macomb County public Works Office and City of St. Clair Shores—Conducted an investigation within the storm sewer system and located the area of the drain that was contributing PCBs to residential canals along Lake St. Clair. The investigation included sediment, stormwater and groundwater monitoring; inspection of the drain interior; review of historical aerial photographs; creation of a project geographic information system (GIS) to better understand of the nature and extent of contamination; and collection of soil borings to characterize the drain's backfill. Oversaw the re-cleaning of the downstream section of the drain, which included water quality monitoring to ensure compliance with the NPDES permit, contractor oversight, waste characterization, and securing EPA approval to solidify the sediments. Oversaw the design, fabrication and operation a sediment extraction and stormwater treatment system to clean the contaminated sediments from the drain and leading further source assessment, environmental monitoring and communication with state and federal agencies and the public.

Project Manager; 10 Mile Drain PCB Investigation, EPA/Environmental Quality Management—Assisted the EPA R5's Emergency and Rapid Response Services (ERRS) Group in conducting a geophysical survey of a residential/commercial area near a PCB-impacted storm drain. This included gaining access agreements from 104 (92 percent) properties, communication with residents and local officials reviewing historical data to select soil boring locations, and assisting with soil borings.

Project Manager; St. Clair River-Lake St. Clair-Detroit River Source Water Protection Network, Macomb County Health Department—Developed a real-time water quality monitoring network at 13 drinking water treatment plant intakes along the St. Clair River-Lake St. Clair-Detroit River corridor, which serves 3 million people in southeast Michigan. This included oversight of the installation, operation, and maintenance of portable gas chromatographs/mass spectrometers, fluorometers, total organic carbon analyzers, and multiparameter probes. Oversaw the development and use of a web-based, password-protected data center which stores and displays the data and developed a notification system used to warn water treatment plant staff of any unusual water quality conditions in their intakes. Developed contaminant threshold values to be used in the notification system based on previous spills and EPA drinking water standards.

Project Manager; Evaluation of U.S. Source Water Vulnerability on the St. Clair River, W.F. Baird & Associates/Great Lakes Observing System (GLOS)—Developed seven spill scenarios which were incorporated into 3-dimensional modeling runs of the St. Clair River to determine the potential impacts to U.S. drinking water treatment plants. Led a meeting with regulators, industries and local governments to gather input on the scenarios and promote buy-in to the study.



ANTHONY N. ARCURI
Senior Scientist II

Project Assignment: Expert Witness

Project Botanist; Orlando Utilities Company Stanton Unit B, Southern Company—Conducted a wetlands delineation, land use/cover mapping and listed plant species survey on the proposed power generating expansion in Orange County, Florida. Prepared the vegetation sections of the supplemental SCA. Prepared/provided expert testimony for the certification licensing.

Education

M.A., Botany—University of South Florida, 1979

B.A., Botany—University of South Florida, 1976

Years with ECT—21
Other Firms—12

Affiliations

Society of Wetland Scientists
National and Florida Associations
of Environmental Professionals
Ecological Society of America

Areas of Specialization

Terrestrial and Wetland Community Ecology, Plant and Animal Taxonomy, Wetland Jurisdictional Determinations, Permitting and Mitigation Design/Monitoring, Endangered and Threatened Plant and Animal Species Evaluations, Vegetation Sampling and Mapping, Environmental Impact Studies and Assessments, Expert Witness Testimony

Project Ecologist; Vandenburg Executive and Tampa International Airports, Vegetation Maintenance and Monitoring Planning and Wildlife Hazards Reporting, Hillsborough County Aviation Authority (HCAA)—Responsible for reviewing all past stormwater management permits, conducting surveys of all wetlands and ponds on airport property, and producing a vegetation maintenance plan to control the growth of nuisance and exotic plant species at Vandenburg Airport in Tampa, Florida. Produced the request for proposal document, coordinated with prospective contractors, and produced the monitoring/reporting program for vegetation maintenance at the airport. In addition, was responsible for reviewing and editing drafts of wildlife hazard assessment reports (i.e., QA/QC).

Project Ecologist; Babcock Ranch Preserve, Florida Department of Agriculture and Consumer Services (FDACS)—Responsible for conducting a field survey and producing an existing land use/cover map and a pre-development land cover map to assess the changes to wetland and upland plant communities from alterations of historic drainage patterns and current land management practices associated with the working ranch in Charlotte and Lee Counties, Florida.

Project Botanist; Polk Power Station Unit 6, SCA, Tampa Electric—Served as project botanist by completing the vegetation sections of the SCA. Also, established wetland jurisdictional determinations along the proposed expansion areas onsite and completed the Environmental Resource Permit application for the power plant expansion in Polk County, Florida.

Project Manager; Dog Branch-Edgefield Regional Stormwater Treatment Facility, SJRWMD—Participated in the design of the planting plan for the 56-acre stormwater treatment facility in East Palatka, Florida, which included upland islands, low marsh, high marsh, and deep water areas. Conducted a QA/QC review of all submittals and prepared the planting cost estimates, a species specific information table with photographs, and other related databases.

Project Botanist; St. Johns-Pellicer-Pringle, 230-kV TLSA Licensing, FPL—Served as the project botanist by compiling all the vegetation-related portions of the application for the 26-mile long, 230-kV transmission line in St. Johns and Flagler Counties, Florida. Prepared and submitted expert testimony.

Ecologist, Baseline Natural Resources Inventory, FDEP—Conducted baseline natural resources inventories of the Wallaby Ranch (410 acres) and Beddingfield (170 acres) properties, both located in the Green Swamp area of Polk County. Also performed quality control reviews of the baseline natural resource inventory reports produced by other ECT ecologists.

Ecologist, Baseline Natural Resources Inventory, SWFWMD— Conducted a baseline natural resource inventory of the Crowder Farms property proposed for a residential subdivision located in the Green Swamp area of Polk County. Reviewed many baseline natural resource inventory reports prepared for proposed conservation easements in the Green Swamp area of Polk and Lake Counties.

Ecologist, Wetland/Upland Assessment, The Trust for Public Land—Prepared a report assessing the upland and wetland portions of a property located in Broward County using existing data sources including aerial photographs, soil survey, quadrangle map, NWI map, and FLUCFCS map.

Project Manager, Hillsborough County Northwest Mitigation Bank Monitoring/Reporting—Conducting a 5-year hydrobiological monitoring of the Northwest Mitigation Bank site in Hillsborough County. Monitoring includes both quantitative and qualitative surveys of vegetation, water levels and wildlife. Responsibilities include the supervision/coordination of planting crews during plant installations.

Project Manager, Gulf Power, Smith Unit 3 Mitigation Project— Designed and permitted the mitigation of wetland impacts on the Smith Unit 3 power plant site in Bay County, Florida. Currently supervising/evaluating the site preparation and tree seedling plantings on 130 acres. Monitored and reported on tree survival over a 5-year period.

Project Manager, Wetland Mitigation, FPLE Forney, L.P.— Designed and permitted the mitigation of wetland/habitat impacts on the FPLE Forney, L.P. power project site in Kaufman County, Texas. Will be supervising/conducting the planting of both onsite and offsite mitigation areas for the project as well as conducting the monitoring/reporting over a 5-year period.

Project Ecologist; Wetlands Permitting, FPLE Forney, L.P.— Conducted wetland jurisdictional determinations, endangered and threatened species assessments and mitigation plan design for wetland permitting associated with the 128-acre Forney Power Project site located in Kaufman County, Texas.

Project Manager, Wetlands Mitigation, FPLE Forney, L.P.— Conducting an ongoing project to develop an alternate offsite mitigation plan and to implement the onsite mitigation. Project includes a 5-year monitoring/reporting for the onsite mitigation through 2006.

JAMES E. POPPLETON

Senior Scientist II

Project Assignment: Wetlands/Ecology

Education

M.A., Botany—University of South Florida, 1976

B.S., Botany—University of Central Florida, 1972

Years with ECT—21

Other Firms—14

Affiliations

Society of Wetland Scientists

Florida Association of Environmental Professionals

Florida Academy of Science

Member; Wetlands Management Advisory Council, Sarasota County Board of County Commissions

Advisor; Governor's Commission on the Future of Florida's Environment

Areas of Specialization

Environmental Permitting, Ecological Assessments, Wetlands Mitigation and Restoration, Endangered Species Assessments, Wetland and Ecological Studies, and Plant Taxonomy

Ecologist; Wetland Ecology, Sprout Project, City of Gainesville—

Conducted all plant ecology field work including vegetation mapping, wetland delineation, functional assessments of wetlands and permit preparation for Phase I of a coal tar clean-up site in Gainesville, Florida. Assisted project engineers in designing post clean-up mitigation for inclusion in a city park master plan development including lakes, natural areas, and boardwalks.

Task Manager; Vegetation Ecology, Volusia County Stormwater Park, Volusia County—

Managed vegetation mapping efforts, wetland delineation, functional assessments of wetlands and park design for a storm water retrofit design project for Volusia County, Florida. Design components including working with project engineers and Volusia County personnel on mitigating impacts associated with stormwater improvements as well as designing wetland enhancement and upland restoration areas as amenities to the plan for a public park on the site in New Smyrna Beach, Florida.

Task Manager; Vegetation Ecology and Wetland Permitting, Brandon Shores to Riverside Transmission Line, BG&E—

Conducted field studies to evaluate a proposed corridor for a 230-kV transmission line upgrade focusing on listed plant and animal species, wildlife utilization, forest resources, and wetlands in Baltimore City, Anne Arundel, and Baltimore City, Maryland. Prepared ecology portions of Sections 2 and 4 of the Certificate of Public Convenience and Necessity (CPCN) and direct testimony for CPCN hearings. Also prepared all necessary information for submission of a Joint Application for submission to the Maryland Department of the Environment (MDE) and the USACE for wetland impacts.

Task Manager; Vegetation Ecology, Dan's Mountain Project, U.S. Wind Force, LLC—

Completed ecological field studies on several hundred acres on the ridge top of Dan's mountain in Allegheny County, Maryland, to gather information on forest extent and quality, delineate wetlands, and search for listed plant species. The site is proposed for the construction of 44 windmills to provide clean electrical energy. This information will be used to complete appropriate sections of a CPCN and wetland permit application to be submitted in 2005.

Task Manager; Ecology, Liberty Gap Wind Farm, Liberty Gap, LLC—

Supervised and participated in an ecological survey of the ridge on Jack's Mountain in Pendleton County, West Virginia. Several hundred acres were traversed to determine the suitability for construction of 44 windmills to generate electricity. Duties included a detailed search of rock habitat for the occurrence of listed plants and animals with unique ecological requirements known to exist in the region. In addition, several parcels of adjacent land were inspected to determine the suitability for construction of access roads to the wind towers from an ecological perspective

Discipline Manager; Vegetation Ecology, AvMed—

Completed detailed vegetation survey on 200+-acre parcel in Gainesville, Florida, proposed for hospital expansion and commercial/residential development to delineate wetlands, evaluate vegetation community types

and quality, and document the presence or absence of listed plant species. Completed all pertinent portions of the Development of Regional Impact (DRI) document regarding upland and wetland vegetation.

Task Manager; Vegetation Ecology, South Ft. Meade Mine Extension, Cargill Fertilizer, Inc.—Prepared plan of study and budgets for vegetation ecology portions of a proposed ADA for Cargill's 11,500+ acre mine extension site in Hardee, County Florida. Tasks included negotiations for the plan of study with Hardee County officials, the Central Florida Regional Planning Council, and FDEP's Bureau of Mine Reclamation. Managed up to three teams of ecologists to conduct mapping, functional assessments of wetlands (WRAP for the USACE; UMAM for FDEP), and intensive listed plant species evaluations using GPS. Oversaw all data input into GIS and QA/QC of data input and mapping efforts. Worked closely with client and agencies at all steps of project.

Discipline Manager; DRI Statement, Nu-Gulf Industries, Inc.—Directed and participated in ecological studies for a 4,500-acre phosphate mine in Manatee County, Florida. Duties included rare and endangered species evaluations, and identification of unique habitats and wetland assessment. Managed coordination of federal, state, regional and local agency jurisdictional delineations for permitting.

Project Manager; Postoperational Wetlands Monitoring, U.S. Generating Company—Prepared 5-year monitoring plan submitted to and approved by Martin County Planning Department, SFWMD, and FDEP. Conducted field work to gather data on preserved isolated wetlands to monitor possible effects on these wetlands due to the operation of a 300+ MW coal-fired electrical generating facility.

Ecology Discipline Manager; Siting Analysis for a Proposed Electrical Generating Facility, TECO Power Services Corporation—Conducted an ecological evaluation of a site near the International Airport in Panama City, Panama, being considered for development of an electrical generating facility.

Project Ecologist; Environmental Impact Assessment (EIA) for 120-MW San José Power Plant, Central Generadora Electrica San José, Ltda.—Responsible for vegetation and wetland surveys for EIA for 120-MW coal-fired power plant in Puerto Quetzal, Guatemala. Conducted transect surveys of mangrove areas which is a protected tree species in Guatemala and developed mitigation plan for mangrove replanting.

Project Scientist, Ecological Studies in Central and South America, National Science Foundation—Conducted ecological field studies focused on epiphyllous fungi and their hosts, including mangroves, in various areas of Central and South America including Belize, Honduras, El Salvador, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Venezuela, Puerto Rico, and Jamaica.



MAYA R. SCOHIER, PWS
Senior Associate Scientist I
Project Assignment: Wetlands/Ecology

Education

B.A., Environmental Science—
University of Florida, 2002

Years with ECT—5
Other Firms—3

Registrations

Professional Wetland Scientist,
No. 1999
Maryland Qualified Professional
Stormwater Erosion and Sedimen-
tation Control Inspector, FDEP
No. 6566
Certified, Mine Safety and Health
Act training

Affiliations

Member of the Florida Native
Plant Society

Areas of Specialization

Environmental Permitting,
Terrestrial and Wetland Ecology;
Wetland Jurisdictional
Determination, Delineation, and
Permitting; Wildlife and
Endangered Species Surveys;
Land Use/Cover Mapping; Tree
Surveys; Mitigation Monitoring

Project Ecologist; Wetland Delineation and Threatened and Endangered Species Search, SeaCoast Natural Gas Pipeline Project; TECO Peoples Gas—Set joint FDEP/USACE wetland delineations along a 50-mile long SeaCoast proposed gas pipeline corridor in Jacksonville, Florida. Conducted threatened and endangered species searches along proposed corridor and photo-documented current conditions of the wetlands.

Project Ecologist, Vegetation Mapping and Threatened and Endangered Species Search, Southern Company Generation—Conducted wildlife surveys and examination of habitats present on Mississippi Power's 1,650-acre tract of the proposed IGCC generating station in Kemper County, Mississippi. Incorporated the survey results into a listed species report, which served as an attachment to the EIS, prepared for DOE.

Wetlands Ecologist; Taylor Energy Center Licensing, Sargent & Lundy, LLC—Served as wetlands ecologist for Florida Municipal Power Agency's project involving 3,200 acres in Taylor County, Florida, proposed for a coal-fired power plant to be licensed through the Florida Electrical Power Plant Siting Act. Duties included wetlands delineations, hydric soils assessments, UMAM, and permit application preparation.

Project Ecologist; Lake Monroe Minimum Flows and Levels Assessment, SJRWMD—Conducted human use and water resource values assessment for Lake Monroe minimum levels considered by SJRWMD. Specifically, participated in assessing lake bathymetry conditions allowing for gradual downslope migration of desirable wetland communities in response to changes in water level by examining water depth at the waterward extent of emergent vegetation and mapping emergent vegetation communities onto a bathymetric map of Lake Monroe.

Project Ecologist; Mosaic Ona Mine Permitting Project; Mosaic Fertilizer, L.L.C.—Performed wetland functional assessment, using Uniform Wetland Assessment Method (UMAM), for 20,500-acre site proposed for surface phosphate mining in the Hardee County, Florida. The assessments entailed qualitatively and quantitatively characterizing location and landscape support, water environment, and community structure of each wetland in reference to high quality wetlands of the same type. Participated in field-meetings with the FDEP to review the scoring of the functional wetland assessments. The project required significant internal and agency coordination to ensure consistency among ecologists and reviewers.

Field Supervisor, Vegetation Ecology, Southern Company Generation—Assisted in managing all ecological tasks associated with the approximately 156 miles of linear facilities (natural gas and reclaimed effluent pipelines, transmission lines, and carbon dioxide pipeline) associated with Mississippi Power's proposed IGCC generating facility located in Kemper County, Mississippi. Duties included arranging logistics; leading several field crews; and gathering/analyzing vegetation data on uplands, wetlands, and listed species. Assisted in incorporating results from the linear facilities studies

as well as data gathered by other consulting firms for an approximately 1,600-acre power plant site and a 31,000-acre lignite mine site into an environmental impact statement (EIS) prepared for the DOE. Also produced two Preliminary Wetland Jurisdictional Form packages for submission to the USACE.

Project Manager; Gopher Tortoise Survey for City of Ocala, Central Testing Laboratory—Conducted a gopher tortoise survey on two parcels of land under the ownership of the City of Ocala, following the latest guidelines and methods outlined by Florida Fish and Wildlife Conservation Commission in Marion County, Florida.

Project Ecologist; SJRWMD—Participated in evaluating the area known as Dog Branch in Putnam County, Florida, for the purposes of recommending the planting plan.

Task Manager, Vegetation Ecology/Wetlands Permitting, BGE—Managed and directed field efforts to acquire data sufficient to satisfy the requirements of a Certificate of Public Convenience and Necessity. In addition, led wetland delineation efforts for the upgrade of transmission corridors in Harford, Anne Arundel, and Baltimore Counties, Maryland.

Project Ecologist; Lighthouse Harbor, Pringle Properties—Served as a project ecologist to delineate wetlands, assess hydric soils, prepare UMAM forms, and prepare permit application for a marina proposed to be located on the north shore of Little Lake Harris in Lake County, Florida.

Project Ecologist; Pine Level, Mosaic Fertilizer, L.L.C.—Served as an ecologist and a team leader to review, revise, and re-map the land use/cover on an approximately 24,000-acre tract of land located in both Manatee and Desoto Counties.

Project Manager; Wetland Due Diligence, The Epoch Corporation—Conducted an overview of the 2,000-acre project site in Bay County, Florida, to determine the general extent and quality of wetlands and habitats known to support listed species.

Project Ecologist; Wetlands Mitigation, Ellis Environmental—Assisted in coordinating the planting of vegetation in a tidally influenced area of the Mayport Naval Station in Duval County, Florida. Conducted monitoring and made recommendations biannually for the site.

Wetlands Ecologist; Development of Regional Impact Substantial Deviation, AvMed—Served as wetlands ecologist on a 186-acre property in Alachua County, Florida, proposed for a hospital satellite campus. Duties included wetlands delineations review with agency staff, hydric soils assessment, and research of local regulations pertinent to water resources buffers.

Project Ecologist; Dans Mountain Windforce, LLC—Served as an ecologist for proposed 69.6-MW renewable wind energy electric generating facility in western Allegany County, Maryland. Duties included wetlands delineations, hydric soils assessments, and permit application preparation.

GARY P. DALBEC
Staff Scientist I

Project Assignment: Field Services

Project Manager; Stormwater Flow Monitoring and Data Collection, SJRWMD—Responsible for designing and installing ISCO® sampling and flow monitoring systems on tributaries to Newnans Lake, Lake Lochloosa, Lake Monroe, and Lake Harney to collect stormwater data and assess nutrient loads from the tributaries.

Project Scientist; Lake Jesup Stormwater Sampling, Seminole County—Assisted with the stormwater sampling program using ISCO samplers at five tributaries to Lake Jesup. Project conducted to assess nutrient loading from the five tributaries to the lake during storm events.

Field Sampling Coordinator; Watershed Assessment, Mosaic Fertilizer, L.L.C.—Responsible for maintaining a 17-station monitoring network and associated water quality sampling and analysis to determine the baseline water quality of the South Fort Meade mine site extension in Hardee County, Florida. Sampling was conducted both monthly and quarterly for 27 parameters, including nutrient loading.

Field Team Leader; Water Quality Studies, City of Port St. Joe—Coordinated and supervised diurnal oxygen and intensive water quality studies consisting of continuous 48-hour *in situ* water quality profiling at multiple stations. Intensive water quality sampling was conducted concurrently with *in situ* profiling and consisted of collecting over 600 samples for chemical analyses.

Field Team Leader; Water Quality Study, SECI—Study conducted to characterize ambient water quality and hydrographic conditions of the Fenholloway River and several of its tributaries for regional impact study. Responsible for the installation and maintenance of water level recorders, thermographs, and recording dissolved oxygen meters. Conducted monthly water quality sampling and discharge measurements on the Fenholloway River and tributaries.

Task Manager/Field Team Leader; WQBEL Study, City of Port St. Joe—Assisted with design and construction of curtain drogues, and coordinated and supervised continuous 48-hour drogue tracking surveys for large-scale Lagrangian current circulation studies.

Field Team Leader; Site Monitoring at Florida Rock Industries, City of Newberry—Responsible for annual DRI monitoring program to assess contamination potential in groundwater, surface water, and soils on Florida Rock Industries' properties located in Newberry, Florida. All sampling is conducted in compliance with FDEP QA/QC requirements/guidelines.

Project Manager; Rice Creek Water Quality Study, Georgia Pacific—Assessed paper mill effluent ability to meet Class III water quality standards after completion of mill process up-grades in Putnam County, Florida.

Field Team Leader; Land Acquisition Project, SFWMD—Coordinated and supervised multiple field teams responsible for installation and sampling of groundwater monitoring wells, collection

Education

A.S., Environmental Technology—Santa Fe Community College, 1977

Years with ECT—11
Other Firms—23

Registrations

SCUBA

Coast Guard Auxiliary Boating Skills and Seamanship
40-hour OSHA hazardous waste health and safety training
24-hour health and safety training for supervision of hazardous waste activities

Affiliations

Florida Ground Water Association
Florida Society of Environmental Analysis

Areas of Specialization

Surface Water Quality and Hydrology Studies; NPDES Permitting; Coordination and Oversight of Field Studies including Water Quality Sampling and Hydrology Measurements, Dye Tracer Studies, and Bathymetry Surveys; Quality Assurance/Quality Control Program Development; Environmental Instrumentation Operation and Maintenance; Data Validation and Management

of surficial soil samples, and irrigation canal sediment samples at large agricultural sites. Sites were being evaluated for possible District acquisition as part of the Everglades Restoration Project. Approximately 6,000 acres of property were screened for groundwater and soil quality determination.

Task Manager; Groundwater Discharge Permitting, Pacific Corp—Responsible for acquisition of all data and information for preparation of a state-required groundwater discharge permit for a proposed 1,000-MW power generating facility. The permit was necessary for operation of evaporation ponds at the facility in Mona, Utah, to dispose of process wastewaters.

Project Manager; Orange Lake Sediment Consolidation Study, SJRWMD—Coordinated field surveys of drought-exposed top of sediment elevations and thickness for comparison with pre-drought survey data to assess possible sediment reduction caused by exposure to atmosphere and other oxidation process. Orange Lake reaches parts of Orange, Lake, Marion, and Alachua Counties.

Project Manager; Payne Creek Generating Station Cooling Reservoir Thermal Study; SECI—SECI Payne Creek Station will discharge heated condenser cooling water to a 570-acre cooling reservoir. The reservoir also receives heated condenser cooling water from another power generating facility which was built prior to and adjacent to SECI's facility in Hardee County, Florida. The thermal study involved installation of a network of recording thermographs in the reservoir to develop a comparative database to evaluate the heat dissipation characteristics of the reservoir prior to and following the Payne Creek Station startup.

Project Manager; Phase I ESA; Bell Mountain, Inc.—Conducted an ESA of a 500-acre site in Marion County, Florida, following ASTM standard practice protocols for site assessments.

Project Manager; Phase I ESAs, Adena Springs, South—Conducted Phase I ESAs of 600- and 1,640-acre tracts in Marion County, Florida, following ASTM standard practice protocols for site assessments.

Project Manager; Lake Griffin Access Canals Sediment Study; Lake County Water Authority—Project was a component of the Lake Griffin restoration program and involved cross-section measurements of sediment accumulation depths in 30 lake access canals. Additional task included collection of over 2 tons of sediment from 45 locations for chemical and physical characteristics analyses.

DON BERRYHILL, P.E.
Vice-President – Client Management

QUALIFICATIONS SUMMARY

Don Berryhill brings over 36 years of experience in responsible positions within local and state government and in the private sector. Don offers clients access to unparalleled industry insight regarding the acquisition of capital project funding and an understanding of Tallahassee and the legislative process.

While in the private sector, Mr. Berryhill spent more than 15 years managing the planning and design of water, wastewater and civil public works projects in the Southeast including project management and regional office management.

EDUCATION

<i>Master of Science</i>	Environmental Health Engineering University of Texas
<i>Bachelor of Science</i>	Civil Engineering Mississippi State University
<i>Licensing</i>	Florida Professional Engineer

PROFESSIONAL HISTORY

2007- Current	<u>Vice-President – Client Management</u> Angie Brewer & Associates, LC
1988-2007	<u>Bureau Chief</u> Florida Department of Environmental Protection
1972-1988	<u>Professional Engineer</u> Private Sector

REPRESENTATIVE EXPERIENCE

As Bureau Chief for the Florida Department of Environmental Protection, Don's accomplishments include:

- Developed, implemented, and managed the award winning Clean Water State Revolving Fund Program (CWSRF) that provided more than \$2.3 billion dollars to local governments in Florida for the planning, design and construction of wastewater, storm water and non-point source facilities.
- Staffed and implemented the Drinking Water Revolving Fund Program (DWSRF) that provided more than \$330 million in funds for drinking water infrastructure in Florida.

FUNDING FOR THE FUTURE



- Managed more than 200 legislatively funded water projects which include approximately \$400 million in funds appropriated in recent years.
- Managed the Water Supply Restoration Program for correction of individual home water supplies that were contaminated with agricultural or petroleum chemicals. Over 900 residential water supplies benefited from this program in 2006.
- Personally assisted communities in crafting funding plans suited to a community's specific needs.

FUNDING FOR THE FUTURE



GARCIA BRIDGE ENGINEERS, P. A.

ANTONIO M. GARCIA, PE

President

Resume

EDUCATION

BS - Civil Engineering, 1965, University of Florida

MS - Civil Engineering (Structures), 1970, City College of New York

REGISTRATIONS

FL/1971/PE11048

DL/2008/PE 15691

PROFESSIONAL AFFILIATIONS

Post-tensioning Institute (PTI)

Precast/Prestressed Concrete Institute (PCI), Bridge Committee

Florida Engineering Society (FES)

American Society of Civil Engineers (ASCE), Fellow

SUMMARY OF EXPERIENCE

Mr. Garcia has been practicing engineering since 1965 as a structural engineer in both the private and public arena. This experience includes bridges (both of steel and concrete), retaining walls, cut & cover tunnels, port facilities, transit stations and maintenance facilities. Throughout his career, Mr. Garcia has been extensively involved in large, multi-disciplinary projects. While with the Florida Department of Transportation, he served as District Special Projects Director overseeing the construction of the Sunshine Skyway Bridge, as State Structures Design Engineer (Chief Bridge Engineer), he was involved in the design decisions for many of Florida's major bridges such as the Acosta Bridge, Edison Bridge, Howard Frankland, and many others. As of June 30, 2004, he has been President of his own firm, Garcia Bridge Engineers, P.A., with his partner, Dr. Juan J. Goñi.

Work History

From	To	Firm	Duties
Sep 1965	Sep 1969	Hardesty & Hanover, NYC	Junior Engineer to Engineer
Sep 1969	Oct 1975	TAMS, Inc., NYC	Engineer to Sr. Eng., and Proj. Mgr.
Oct 1975	Sep 1982	TAMS, Inc., Boston	Chief Bridge Engineer
Sep 1982	Feb 1983	TAMS, Inc., NYC	Sr. Bridge Engineer
Feb 1983	Sep 1993	FDOT, Tallahassee	Structures VE Engineer, PM Sunshine Skyway Bridge, District Director Sunshine Skyway Bridge, Chief Bridge Engineer.
Sep 1993	Mar 1995	DRC Consultants, NYC	Sr. Vice President
Mar 1995	July 1997	T. Y. Lin, Inc. Tallahassee	DRC was bought out by TYLin, Vice President.
Sep 1997	Aug 1999	PBS&J, Orlando	Senior Engineer
Aug 1999	Apr 2003	DMJM+HARRIS, Inc., Tall	Vice President
May 2003	Jul 2004	Weidlinger Associates, Inc., Tall	Senior Associate
Jul 2004	Present	Garcia Bridge Engineers, P. A., Tallahassee	President

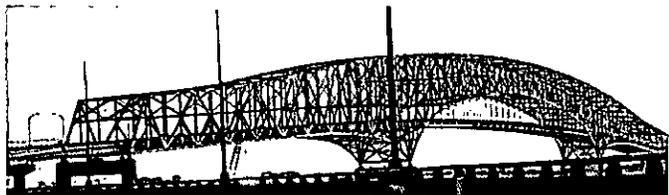
SAMPLE OF MR. GARCIA'S DESIGN PROJECTS IN FLORIDA

Capital Cascade Park (Tallahassee, Florida): Mr. Garcia was intimately involved with the design of 47 cantilevered retaining walls ranging in height from 6 ft. to 27 ft. and in length from 20 ft. to 530 ft. In addition, a series of concrete box culverts were designed ranging in size from 12ft x 8 ft to 8 ft x 3.5 ft. In addition, two signature pedestrian bridges were designed to access a central open air plaza that will accommodate concerts. The project is currently under construction.

Lafayette Heritage Park Pedestrian Bridge (Tallahassee, Florida): Mr. Garcia was involved in the design of a 140 ft. suspension pedestrian bridge spanning over the CSR railroad right of way for the City of Tallahassee Parks Department. Along with the main span, the approach structures constituted a major element of the design. The location has limited access and was designed to allow a contractor to use small erection equipment and limit the damage to the park. The project will go to bid later in 2011.

Hart Bridge (Jacksonville, Florida):

Senior Engineer for the design of strengthening of members of this steel through truss bridge over the St. Johns River. The work was performed as a member of GBE and as a subconsultant to another firm. Reviewed and checked the Load Rating (LRFR according to Florida Guidelines) of this bridge performed by the principal Consultant.



State Road 30 (US 90) Carrabelle Bridge, Carrabelle (FL). Performed Load Rating (LRFR according to Florida Guidelines) of this bridge to evaluate the effects of a new Water Main Pipe to be hung from the underside of the bridge deck.

Big John Monahan Bridge, SR 710 over St. Lucie Canal (Florida): Senior Engineer for the QC of the load rating for this steel girder and floorbeam bridge. The work was performed as a member of GBE and a subconsultant to another firm.

Highland View, US 98 (Florida): After the completion of the Choctawhatchee Bridge, the Highland View bridge was designed by a consultant and reviewed by the FDOT Central Office under my direction. The bridge extended the previous record for a drop-in span from 200 ft. to 250 ft.

Choctawhatchee Bridge, US 331 (Florida): Oversaw the design of the first drop-in girder bridge in the state of Florida. As Chief Structural Engineer for the FDOT, oversaw the in-house team design of the replacement of an existing bascule bridge over the ICWW. The bridge, consisted of the newly developed Florida bulb-tee in four span post-tensioned continuous units with the center section consisting of a three span post-tensioned unit with a center span of 200 ft. The design set the standards to be used in Florida for a number of other drop-in girder structures.



David L. Cowles, Jr., R.L.A. / 2285 Trescott Drive / Tallahassee, FL 32308 / (850) 545-7035 / www.cowlesLA.com

RESUME

Professional Registration:

Registered Landscape Architect, Florida Number: LA6666917
ISA Certified Arborist, Number: FL-5314A

Education: FAMU, Master of Landscape Architecture, 2000
FAMU, B.S. Landscape Design & Management 1996
TCC, AA 1993

Experience: 2009-present Cowles Landscape Architecture (owner) / Tallahassee, Florida
2007-present FAMU, SOA - MLA (adjunct teaching) / Tallahassee, Florida
2000-2009 Moore Bass Consulting, Inc. / Tallahassee, Florida
1994-2000 Cowles Landscaping (owner) / Tallahassee, Florida
1994 Hauge Landscaping / Tallahassee, Florida
1993 Ferrell Construction / Tallahassee, Florida

Design Experience:

Type – theory; analysis; site planning; ecology; environmental permitting; irrigation; plant identification; theory; cost estimating; schematics; presentation graphics; construction details.
Scale – Regional; Community; Institutional; Campus; Urban; Park; Garden Design and Residential.
Permitting – Natural Features Inventory; Environmental Site Assessment; Canopy Road Tree Mitigation Permit; NPDES; F.D.O.T. Drainage/Driveway; F.D.E.P. Stormwater; County/City Stormwater; County/City Site Plan Modifications; Reforestation Calculations; Certified Arborist Consultation Services.

Teaching – Adjunct Professor in the FAMU School of Architecture; MLA graduate level courses for six semesters (Landscape Graphics, Landscape Construction, Site Engineering and Site Implementation.)

Technical Experience:

AutoCAD; Adobe; Adobe Photoshop; Microsoft Office Excel; Microsoft Office Word; Microsoft Office Outlook; FDEP Qualified Stormwater Management Inspector; Sketchup

Abilities:

The practical applications of my strong horticultural background and hands-on work experience are balanced with technical competency, knowledge of ecology, design theory and presentation graphics.

Awards:

2000 – FAMU – ASLA: Certificate of Honor (For Excellence in the Field of Landscape Architecture)
1997 – FLDA – The 1997 Landscape Design Award: Winner (Design Category)

SELECTED PROJECT EXPERIENCE

Florida State University (FSU):

2001 - 2008

Landscape Architecture experience for FSU Campus renovations and new construction projects including master planning, landscape plans, irrigation plans, details, site amenities, certified arborist consultation, construction administration and LEED qualifications.

List of Projects:

Woodward Avenue Pedestrian Corridor	Parking Garage #1
Heritage Grove	Parking Garage #2
Thrasher Building (College of Medicine)	Parking Garage #3
Covered Tennis Facility / Multipurpose Teaching	Parking Garage #6
West Dining Facility	Psychology Building
Ragans Hall	Wildwood Residence Hall
Band Field	Seminole Golf Clubhouse
Student Services Building	Thagard Health Center
King Life Sciences Building	Chemical Sciences Labs
Call Street Pedestrian Corridor – Phase 1, 2, 3 & 4	Classroom Building
Magnetic Lab Tower	Muphree Street Corner
Panama City Academic Center	

Tallahassee Memorial Hospital (TMH):

2001 - 2008

Landscape Architecture experience preparing Natural Features Inventory and Environmental Impact Analysis for tracts associated with TMH campus expansion. Produced landscape & irrigation plans for the Bixler Emergency Center and multiple properties adjacent to Surgeons Drive.

Capital Circle / Design Guidelines – Blueprint 2000 Improvements:

Blueprint 2000

2004

Landscape Architecture experience preparing plans and guidelines for new landscaping (associated with road widening), multi-use trail, amenities and stormwater pond multi-use park.

Bradfordville Target:

Target Corporation

2004

Landscape Architecture experience preparing Environmental Management Plans, wetland mitigation documents, natural area management plan, stormwater management irrigation area plans, FDEP and NPDES permitting documents.

Rivers Landing – Private Subdivision:

Pepper Ghazvini

2005

Landscape Architecture experience including Environmental Management Plan permitting, SWMF planting, reforestation calculations, phasing, and certified arborist inspection.

Kate Ireland Parkway on 319 in Leon County:

Rex Shiver Landscaping, Inc.

2005

Landscape Architecture experience performing FDOT Contractor Quarterly Plant and Bed Inspections & Reports.

3/2/2011

**Lake Jackson View Park – Passive Recreation and Multi-Use Park:
Leon County Parks Department
2007**

Landscape Architecture experience producing master plans, permit drawings, construction details and construction administration services. Specific elements of the improvements include mulch trail, amenities, observation boardwalk, canoe launch / dock, playground, parking and irrigation.

**Florida Supreme Court:
Hoy+Stark Architects
2008 - 2009**

Registered Landscape Architecture experience producing landscape & irrigation plans and as-built drawings / report. The scope also included certified arborist consultation services such as tree mitigation reports, risk assessment & evaluation and construction monitoring.

**Florida State University (FSU):
2009 - present**

Registered Landscape Architecture experience with FSU Campus renovations and new construction projects that include landscape plans, irrigation plans, details, certified arborist consultation and construction administration.

List of Projects:

Covered Tennis Facility / Multipurpose Teaching
Parking Garage #6

**Westminster Oaks – Maguire Center for Lifelong Learning:
Westminster Services, Inc.
2009**

Registered Landscape Architecture experience preparing amenity landscape plan, irrigation plan, cost estimates and construction administration. Also produced was a concept sketch and hardscape plan for outdoor dining area.

**NFREC – Outdoor Demonstration Garden & Walking Trail:
North Florida Research & Education Center (NFREC)
2010**

Registered Landscape Architecture experience preparing concept plan, master land-use / pedestrian circulation plans, themed spaces and phasing plans. The gardens will serve as a living laboratory to evaluate new plants and as a living classroom to demonstrate environmentally sound landscaping practices. Trails will integrate pre-existing plantings with planned gardens showcasing plants under study by the NFREC.

**Leon County Operations Center – Phase II:
Johnson Peterson Architects
2010**

Registered Landscape Architecture experience providing a re-vegetation landscape plan and certified arborist consultation services such as tree mitigation reports, risk assessment & evaluation and construction monitoring.

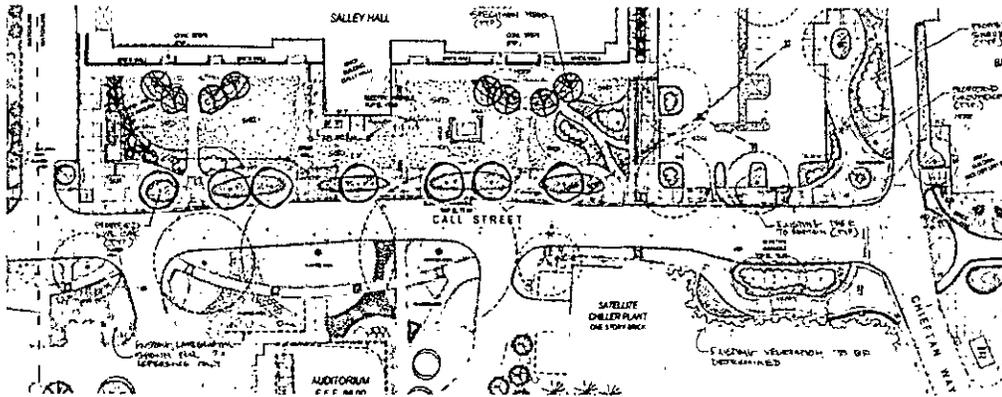
**Westminster Oaks – Pine Laurel Subdivision:
Westminster Services, Inc.
2010 - 2011**

Registered Landscape Architecture experience preparing overall subdivision landscape standards, cost estimates and prototypes. Lot-specific plans were prepared for each home at the time of construction.

3/2/2011

SELECTED PROJECT IMAGES

Florida State University (FSU):

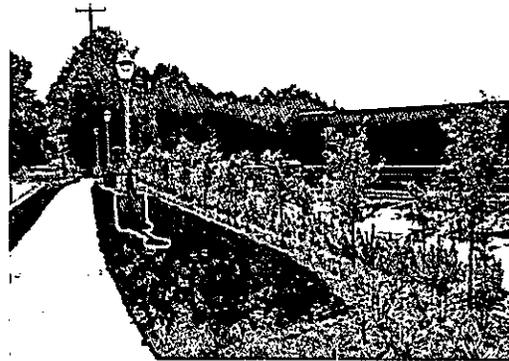
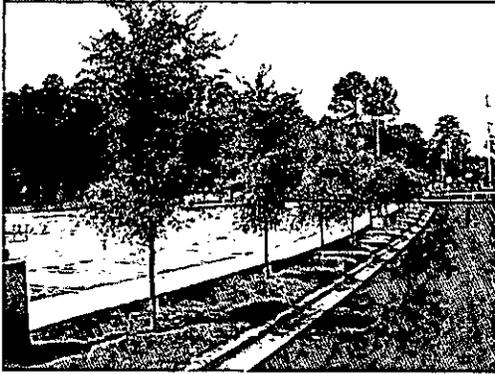


Capital Circle / Design Guidelines – Blueprint 2000 Improvements:

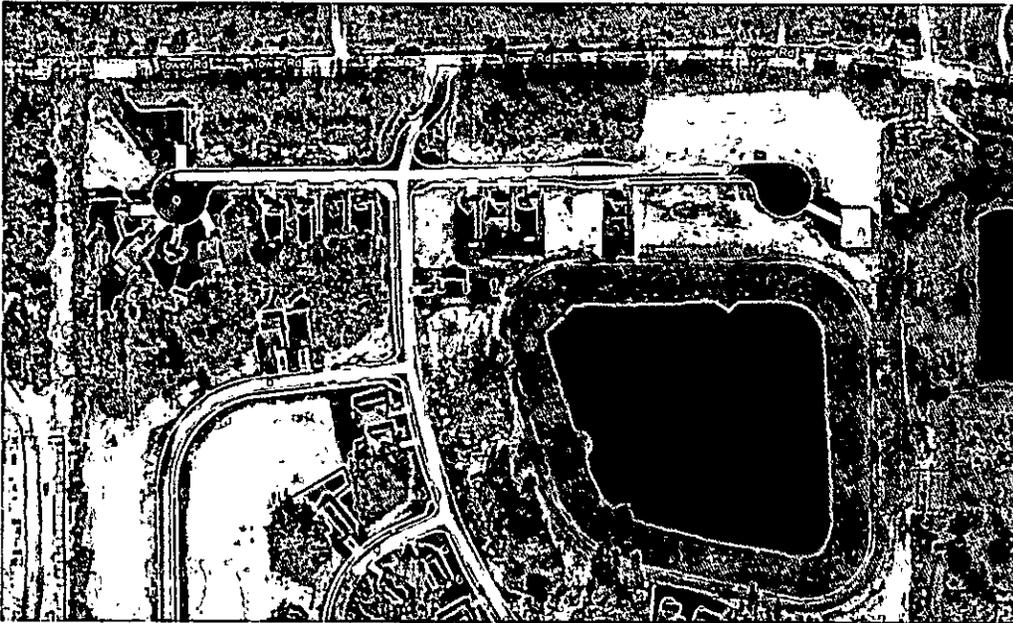


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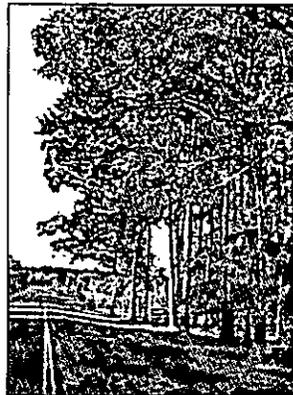
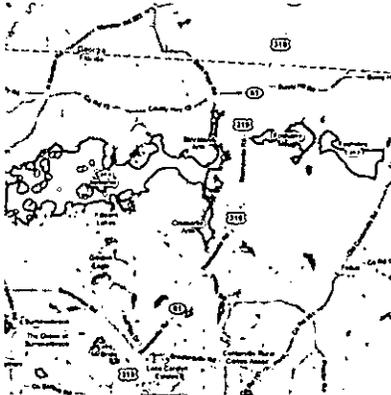
Bradfordville Target:



Rivers Landing – Private Subdivision:



Kate Ireland Parkway on 319 in Leon County:

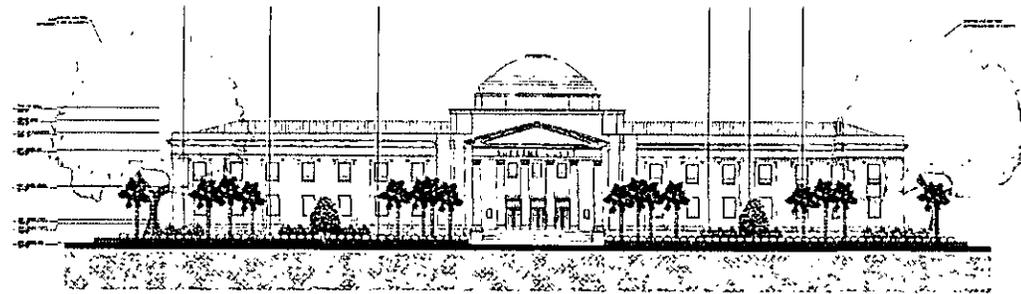


3/2/2011

Lake Jackson View Park – Passive Recreation and Multi-Use Park:



Florida Supreme Court:

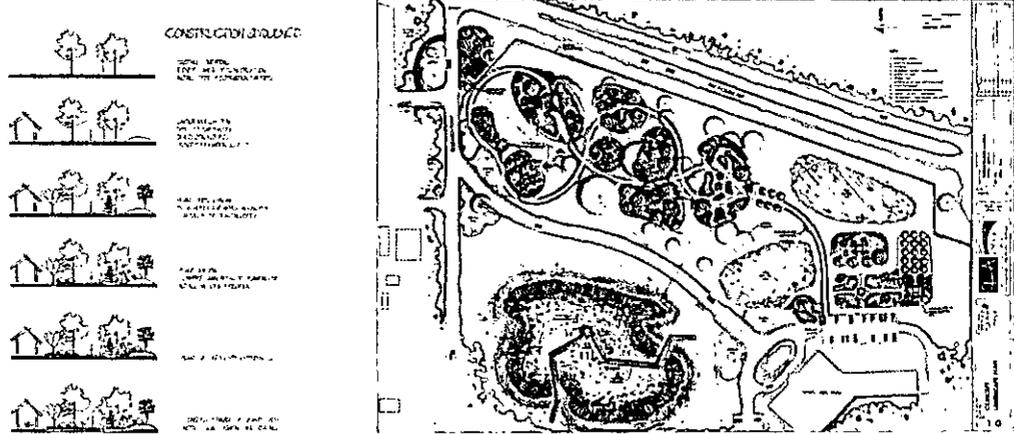


Westminster Oaks – Maguire Center for Lifelong Learning:

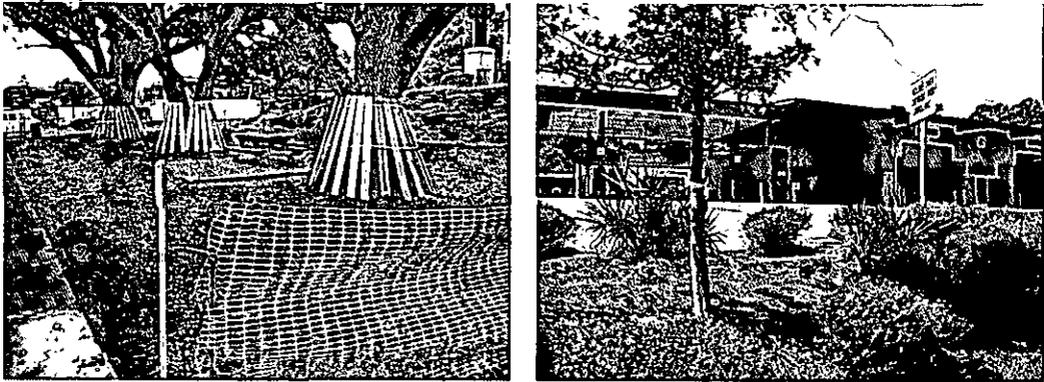


3/2/2011

NFREC – Outdoor Demonstration Garden & Walking Trail:



Leon County Operations Center – Phase II:



Westminster Oaks – Pine Laurel Subdivision:



APPENDIX C
WBE/MBE CERTIFICATIONS

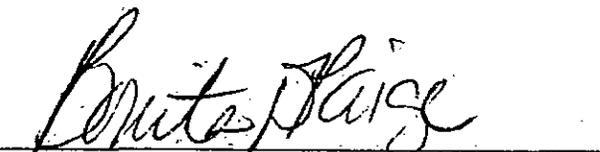


This certifies that
**ENVIRONMENTAL AND GEOTECHNICAL
SPECIALTIES, INCORPORATED**
is recognized as a
Minority/Women-Owned Business Enterprise
under the
**City of Tallahassee and Leon County
Consortium Interlocal Agreement**

For a period of one (1) year beginning:
May 18, 2010 to May 31, 2011



MBE Administrator



Certification Specialist



This certifies that

GARCIA BRIDGE ENGINEERS, P.A.

is recognized as a

Minority/Women-Owned Business Enterprise

under the

City of Tallahassee and Leon County

Consortium Interlocal Agreement

For a period of one (1) year beginning:

DECEMBER 10, 2010 TO DECEMBER 31, 2011



MBE ADMINISTRATOR



CERTIFICATION SPECIALIST

Leon County Board of County Commissioners
Minority, Women & Small Business Enterprise Division

Certifies that

GARCIA BROTHERS, P.A.

is recognized as a

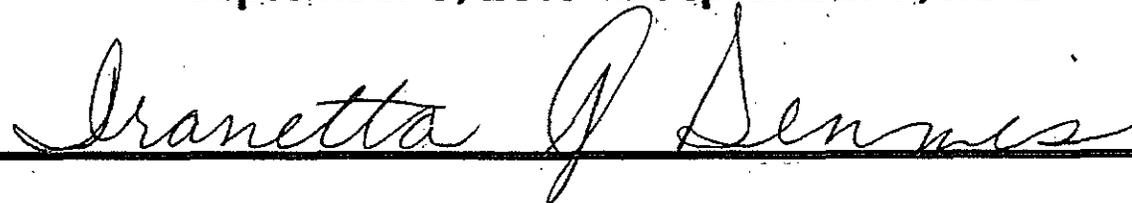
Small Business Enterprise

Under the Leon County

Purchasing, Minority, Women & Small Business Enterprise Policy 96-1

For a period of two (2) years beginning:

September 8, 2010 to September 7, 2012



Iranetta J. Dennis, Leon County M/WSBE Director



State of Florida
*Minority, Women &
Service-Disabled Veteran*
Business Certification

Angie Brewer & Associates, L.C.

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

07/28/2009 to 07/28/2011

Linda H. South, Secretary

Florida Department of Management Services
Office of Supplier Diversity



This certifies that
ARCHAEOLOGICAL CONSULTANTS, INC.
is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:
March 5, 2010 to March 31, 2011



MBE Administrator



Certification Specialist



This certifies that

INTRANET LAB SERVICES, LLLP

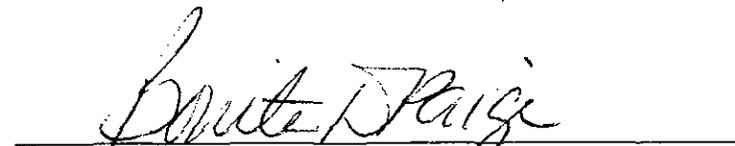
is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:

FEBRUARY 16, 2011 TO FEBRUARY 29, 2012



MBE ADMINISTRATOR



CERTIFICATION SPECIALIST



State of Florida
*Minority, Women &
Service-Disabled Veteran*
Business Certification

IntraNet Lab Services, LLLP

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

September 15, 2009 to September 15, 2011

Torey Alston, Executive Director

Florida Department of Management Services
Office of Supplier Diversity



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APPENDICES

APPENDIX A—COMPANY AND INDIVIDUAL LICENSES AND REGISTRATIONS

APPENDIX B— RESUMES AND PROJECT SUPPORT PERSONNEL

APPENDIX C—WBE/MBE CERTIFICATIONS



ENVIRONMENTAL SUPPORT SERVICES

ENV-A. ABILITY OF PROFESSIONAL PERSONNEL

ENV-A.1. Professionals Available for Assignment

This section describes the total number of ECT professionals who may be assigned to the project in this work category, and their availability to provide services on relatively short notice for the small to medium size projects that are contemplated in this contract.

ECT has identified 23 key ECT professionals on the organization chart (see Figure ENVA-1) as the primary individuals to provide services in the Environmental Support Services work category (licenses and registrations are provided in Appendix A). These personnel are listed on the following table to indicate projected/known commitments for the year 2011, and estimates of their total manhours available for the project. The anticipated availability of these personnel (over 10 man-years in 2011) is more than sufficient to complete the tasks anticipated under this contract. If additional manhours are needed, ECT has adequate backup staff based in its eight Florida offices.

Name	Project Assignment	Committed Percent for 2011	Available Percent for 2011*	Available Manhours
Ronald R. Potts, P.E., P.G.	Project Manager; Task Manager— Contamination Assessments, Re- medial Design	35	50	1,040
Susan M. McConnell, LEP	Assistant Project Manager ; Task Manager—Environmental Assess- ments; Contamination Assessments	45	40	832
Larry Danek, Ph.D.	Project Director	30	55	1,144
John D. Bonds, Ph.D.	Quality Assurance	25	60	1,248
James Spinnenweber, P.E.	Task Manager—Remedial Design and Construction	50	35	728
Lisa Ricker, PWS	Task Manager—Wetlands and Ecology	45	40	832
Mark Culbreth, P.G.	Task Manager—Hazardous Waste, Brownfields	45	40	832
Leland Smith, P.E., D.WRE	Task Manager—Water Resources	35	50	1,040
Maria L. Cruz	Task Manager—GIS/CADD	25	60	1,248
Lee Norris	Task Manager—Wetlands Delinea- tion, Field Services	37	48	998
Darren Stowe, AICP	Environmental Assessments	45	40	832
Satish Kastury	Hazardous Materials	45	40	832



Name	Project Assignment	Committed Percent for 2011	Available Percent for 2011*	Available Manhours
Michael Duvall, P.G.	Hazardous Materials, Asbestos	45	40	832
CeCe McKiernan	Hazardous Materials	45	40	832
Brad Pekas, P.G., P.E.	Groundwater Modeling	35	50	1,040
Ahmed Said, Ph.D., P.E.	Modeling	37	48	998
Shirish Bhat, PhD.	Surface water Modeling	30	55	1,144
James E. Poppleton	Wetlands and Ecology	40	45	936
Maya Scohier	Wetlands and Ecology	40	45	936
David Sanders, E.I.	Field Services	35	50	1,040
Gary P. Dalbec	Water Quality	50	35	728
Mark Seibel	GIS/CADD	25	60	1,248
Michael Racca	GIS/CADD	30	55	1,144
TOTAL				22,484

*Based on maximum of 85 percent.

ENV-A.2. Brief Resumes of Key Project Personnel

This section provides brief resumes for key ECT personnel to be assigned to the project under this work category. Note that some personnel are proposed to fill more than one role. An organizational chart for this project is also presented for reference as Figure ENVA-1. Resumes for other ECT personnel shown in the organizational chart are provided in Appendix B.

ECT has adequate resources to assign additional personnel if needed to perform work related to the contract. The summary information provided in this section is, however, limited to the key team member assignments identified in the preceding section. Key personnel are the project manager, alternate project manager, project director, and task managers.

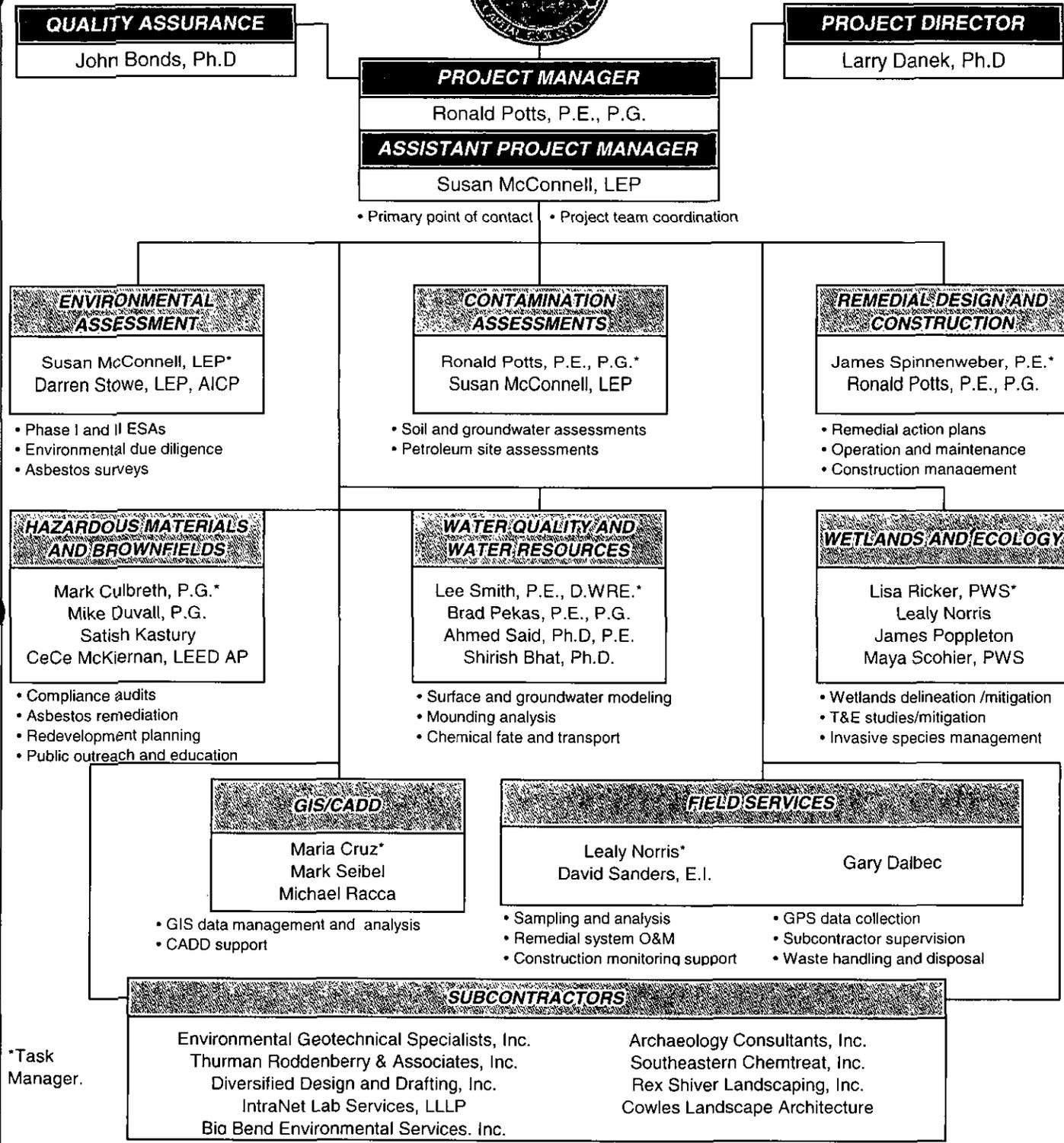


FIGURE ENVA-1.
PROJECT ORGANIZATION AND KEY PERSONNEL
ENVIRONMENTAL SUPPORT SERVICES
 Source: ECT, 2011.





**PROJECT MANAGER—ENVIRONMENTAL SUPPORT SERVICES; TASK
MANAGER—CONTAMINATION ASSESSMENTS**

1. **Name and Title:** Ronald Potts, P.E., P.G., Senior Engineer
2. **Job Assignment for Other Projects:** Work assignments include design engineer for soil and groundwater remediation systems, geologic review and assistance on groundwater contamination assessments and Phase I and Phase II environmental site assessments (ESAs), project manager, and client manager.
3. **How Many Years with This Firm:** Mr. Potts has worked full time for ECT for the past 6 years. Prior to that time, he worked for ECT on a part-time basis for over 4 years.
4. **How Many Years with Other Firms:** Mr. Potts has a total of 35 years post graduate professional experience, having worked for 24 years in the Tallahassee area, 11 years with other consulting firms, and 7 years with the Northwest Florida Water Management District (NFWFMD).
5. **Experience:** Experience in a variety of projects as well as project and line management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$1,000,000 on large contamination assessment and remedial design projects. Specific project involvement was primarily as the lead geologist or engineer and/or project manager.
6. **Education:** B.A. in Physical Sciences—Geology/Physics
M.S. in Geological Engineering
7. **Active Registrations:** Professional Engineer in Florida, Alabama, Arkansas, Colorado, and Georgia. Professional Geologist in Florida.
8. **Other Experience and Qualifications Relevant to this Project:** As the project manager, Mr. Potts will be responsible for client coordination and satisfaction, administrative and project team coordination activities, routine project administrative matters, and maintenance of an effective interface with subcontractors.

As task manager, Mr. Potts will be responsible for:

- Technical completion of the task.
- Preparation of task tables, figures, and report.
- Ensuring task schedules/budgets are met.
- Communication with project manager.



Examples of Mr. Potts' relevant project experience include the following:

Project Manager; Continuing Civil Engineering and Environmental Consulting Services, Leon County—Responsible for overall execution of this active contract to provide general environmental services to the County on an as-needed basis. Duties include obtaining task assignments and assuring client satisfaction as well as managing projects and providing professional guidance for staff engineers and scientists. Project includes Phase I/II ESAs, contamination assessments, construction oversight for underground storage tank (UST) and aboveground storage tank (AST) sites, wetlands delineation, ecological studies and other environmental support services as requested.

Project Manager; Continuing Civil Engineering and Environmental Consulting Services, City of Tallahassee—Responsible for managing projects and providing professional guidance to project engineers and scientists working on this continuing services contract. Project services include Phase I/II ESAs, contamination assessments, remedial action planning and design, construction oversight for UST sites, stormwater engineering, hazardous waste projects, air permitting, wetlands delineation, ecological studies and other environmental support services.

Project Manager; Continuing Services Agreement for Contractual Services, NFWFMD—Ongoing contract for providing professional, technical and field assistance for the environmental resource permit (ERP) program for the NFWFMD. Responsible for client satisfaction and coordinating personnel needs with the NFWFMD; including placement of ECT personnel either part time, as needed, or full-time in NFWFMD offices. Performed ongoing ERP application reviews.

Senior Hydrologist; Division of Resource Management, NFWFMD—Engineering design and planning tasks for various projects relating to stormwater, surface water quality, groundwater, water supply planning, and other similar areas of study. Prepared and managed Phase I ESAs, boat ramp and erosion control designs on District lands, and other engineering projects for Lands Division.

Senior Engineer and Geologist; Consulting Firm—Conducted various environmental, engineering and geological projects relating to stormwater, wastewater, petroleum and hazardous waste, soil and groundwater. Prepared permits for the Florida Department of Environmental Protection (FDEP) and water management district review.

Technical Director/Department Manager; Consulting Firm—Provided professional guidance and reviewed performance of staff engineers and geologists. Projects included ESAs, contamination assessments, remedial action planning and design, construction oversight for underground storage tank sites, hazardous waste projects, and air permitting.



Project Engineer; Consulting Firm—Managed and conducted projects dealing with soil and groundwater contamination assessments and remediation of contaminated sites involving RCRA, CERCLA and state of Florida petroleum cleanup rules. Conducted surface water hydrology and quality investigations. Performed Phase I and Phase II ESAs for commercial and industrial clients.

ASSISTANT PROJECT MANAGER—ENVIRONMENTAL SUPPORT SERVICES; TASK MANAGER—ENVIRONMENTAL ASSESSMENT

1. **Name and Title:** Susan M. McConnell, LEP, Staff Scientist
2. **Job Assignment for Other Projects:** Work assignments include soil and groundwater petroleum contamination assessments and remediation and Phase I and Phase II ESAs.
3. **How Many Years with This Firm:** Susan has worked for ECT for 10 years.
4. **How Many Years with Other Firms:** Susan has worked for other environmental companies for an additional 6 years.
5. **Experience:** Experience in a variety of projects as well as project management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, up to \$1,000,000 on large contamination assessment and remedial design projects. Specific project involvement was primarily as the staff scientist and/or project manager.
6. **Education:** B.S. in Construction Engineering Technology.
7. **Active Registration:** Licensed Environmental Professional.
8. **Other Experience and Qualifications Relevant to this Project:** As the assistant project manager, Susan will assist the project manager as needed with administrative and project team coordination activities, routine project administrative matters, and maintenance of an effective interface with subcontractors.

As task manager, Susan will be responsible for:

- Technical completion of the task.
- Preparation of task tables, figures, and report.
- Ensuring task schedules/budgets are met.
- Communication with project manager.



Examples of Ms. McConnell's relevant project experience include the following:

Assistant Program Manager; State Cleanup Contract, FDEP—Assist the program manager with day-to-day activities of the State Cleanup Contract which consists of keeping track of deliverable due dates, project status, and monthly updates to FDEP.

Project Manager; Asbestos Surveys, City of Tallahassee—Conducted NE-SHAP asbestos inspection on two properties for demolition purposes. The inspection included site walkover, collecting representative samples, and report preparation.

Project Manager; Phase I ESA with Limited Asbestos Survey, Numerous Clients—Conducted Phase I ESAs in accordance with ASTM E-1527 with all appropriate inquiry, and performed limited asbestos surveys of properties in Washington and Leon Counties, Florida. The projects included site walkover, collection of suspect asbestos materials, historical records review, interviews, and report preparation.

Project Manager; Site Assessments, FDEP Preapproval Contract—Manage 8 to 10 State contract sites through north and central Florida. The projects include scheduling, assessing any contamination both horizontally and vertically, field sampling of soil and ground water, report writing, budget, installation of remedial systems, and monitoring.

Environmental Technician; Taylor Energy Center Groundwater Study, Sargent & Lundy—Provided assistance in the collection of ground water and potable water, and other field activities on the 3,200-acre site in Taylor County, Florida, for the Florida Municipal Power Authority's proposed power plant site.

Project Manager; Certified Asbestos Investigations, Confidential Client—Responsibilities included preparing proposal and conducting facility investigation at a former nursing home in East Point, Florida, to determine whether or not asbestos was present.

Task Assistant; IAQ Analysis, Cambridge Systematics—Performed indoor air sampling for fungi/bacteria, volatile organic compounds, and total dust at the facility in Tallahassee, Florida.



PROJECT DIRECTOR/PRINCIPAL-IN-CHARGE

1. **Name and Title:** Larry Danek, Ph.D., President and Principal Scientist
2. **Job Assignment for Other Projects:** Project director and project manager in a wide variety of multidisciplinary projects, and principal investigator for research projects.
3. **How Many Years with This Firm:** Dr. Danek has worked for ECT for 23 years.
4. **How Many Years with Other Firms:** Prior to ECT, Dr. Danek worked for other consulting firms for an additional 16 years.
5. **Experience:** Experience in a variety of projects as well as project and line management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$20,000,000 for a large brownfield contamination assessment, remediation and site redevelopment project. Specific project involvement has typically been as project manager, project director and/or principal investigator.
6. **Education:** Ph.D. in Physical Sciences
M.S. in Physical Sciences
B.S. Geological Oceanography
7. **Active Registration:** Not applicable.
8. **Other Experience and Qualifications Relevant to this Project:** As the president of ECT, Dr. Danek will commit the necessary ECT resources to ensure the project manager has sufficient resources and experienced personnel to complete all work under this contract on time and within budget.

Examples of Dr. Danek's relevant project experience include the following:

Project Director; Environmental Consulting Services, Leon County— Assisting project manager and staff in all areas necessary to ensure quality environmental consulting services are provided to the client's satisfaction.

Project Manager; East Gainesville Depot Park Brownfields Redevelopment Program, Gainesville Regional Utilities/City of Gainesville—Responsible for management and administration of a project to remediate coal tar and other hazardous contaminants from a brownfield site near downtown Gainesville and redevelop the site as a regional stormwater park. A regional stormwater treatment basin has been designed to provide treatment for 89 acres of downtown Gainesville. A multiple best management practice approach was taken, including the use of pretreatment units and wetland polishing along with the use of a wet detention



basin containing various native plant species to remove contaminants including sediment and nutrients prior to discharge to Sweetwater Branch. Responsibilities also include coordination between multiple agencies in the remediation clean-up, site development, and permitting phases of the project. The site is currently undergoing remediation, with funding assistance from FDEP.

Facilitator; Lower St. Johns River Technical Advisory Committee (TAC)—As a subcontractor, served as a facilitator for 3 years for the TAC, which included organizing and leading planning meetings for addressing concerns and preparing an action plan for the St. Johns River. Duties also included prioritizing and ranking special projects for funding through direct legislative appropriation.

Project Director; Dog Branch-Edgefield Regional Stormwater Treatment System, St. Johns River Water Management District (SJRWMD)—Participated in the management and design of a planting plan for a 56-acre stormwater treatment facility. The system was designed to utilize plants to remove phosphorus, nitrogen, and sediment from agricultural pollution sources and polish the stormwater prior to release into the St. Johns River near Palatka.

Project Technical Director; Wayne County Rouge River National Wet Weather Demonstration Program, Assessment of Toxic Contaminants and Restoration of Newburgh Lake—Provided technical oversight for a team of aquatic biologists and chemists investigating the occurrence and distribution of toxic metals and organic compounds. Emphasis is placed on contaminants identified in Great Lakes Initiative (GLI) guidance document as bioaccumulative chemicals of concerns (especially mercury and PCBs). The sampling program, implemented in 1996, focused on establishing the occurrence, impact, and potential sources of toxics in water, sediment, and fish throughout the watershed. After initial studies were completed, restoration plans were prepared in 2000; remediation of the lake included removal of sediments contaminated with PCBs and metals. The lake bottom was recontoured and native wetland species were planted to remove contaminants.

Project Manager; Rodman Reservoir Restoration Environmental Assessment, SJRWMD—Conducted three separate projects to help assess the potential environmental impacts of restoring the 6,000-acre Rodman Reservoir in Putnam and Marion Counties, Florida, to its original riverine conditions. These studies included: (1) bathymetric and sediment thickness survey to determine the reservoir volume and sediment volume within the reservoir; (2) water quality and sediment quality surveys to determine the past, the present, and predict the future sediment and water quality conditions under various restoration scenarios; and (3) forest restoration modeling using FORFLO to predict the revegetation of the reservoir under 256 different scenarios of restoration, planting, and hydrologic conditions.



QUALITY ASSURANCE

1. **Name and Title:** John D. Bonds, Ph.D.
2. **Job Assignment for Other Projects:** Dr. Bonds, with a Ph.D. in analytical chemistry, has served as quality assurance (QA) officer on many company projects. Dr. Bonds has managed environmental consulting projects requiring environmental assessments, contamination assessments, remedial design and construction, hazardous materials and brownfields, water quality, wetlands and ecology, and field planning and services; and has an in-depth knowledge of the quality control (QC) procedures that must be in place to assist the company in assuring a quality product is provided. Dr. Bonds maintains the corporate quality manual and ensures it is updated on a periodic basis.
3. **How Many Years with This Firm:** Dr. Bonds has been with ECT for 18 years.
4. **How Many Years with Other Firms:** Dr. Bonds worked for another major environmental consulting firm for 22 years (laboratory manager 6 years and senior project manager and QA officer for 16 years), and also worked as a laboratory director for a government contractor.
5. **Experience:** Dr. Bonds has broad-based experience in all phases of environmental consulting. He has managed numerous task order contracts with values from \$1 to \$20 million.
6. **Education:** Ph.D., Analytical Chemistry
B.S., Analytical Chemistry
7. **Active Registration:** N/A.
8. **Other Experience and Qualifications Relevant to this Project:** As previously stated, Dr. Bonds' experience is very broad-based in the environmental consulting arena. Examples of his experience include the following:

QA Officer; Evaluation of Water Quality Around the Town of Suwannee, Florida Department of Health—Responsible for preparation of QA plan to meet Florida Department of Health/FDEP criteria. Responsible for periodic audits throughout the life of the project.

QA Officer; QA Plans and Audits, Various Clients—Responsible for preparing QA plans and performing data audits for numerous projects. Also assisted in identification and implementation of corrective actions, as needed.

QA Officer—Former QA officer for a company of more than 1,200 employees with analytical laboratories in Florida, Colorado, and Missouri. Responsible for preparing QA plans, training, auditing, and managing a QA staff of 10. Prepared and maintained CompQAP in compliance with state of Florida requirements.



Project QA; Ford Motor Company—Responsible for updating ECT’s QA plan to meet the ISO 14000 requirements for consultants and supplier to the Ford Motor Company.

Project Scientist; Mississippi Power Environmental Impact Statement (EIS), Southern Company—Assisted with data evaluations and EIS document preparation for water quality, streams and rivers, socioeconomics, transportation, and other aspects of permitting a proposed coal-fired power plant in Kemper County, Mississippi

Project Manager; Significant Deviation to the Existing Santa Fe HealthCare Development of Regional Impact (DRI), Genesis Group/AVMED, Inc.—Responsible for ecology, water quality evaluations, wetlands, geology/hydrogeology, solid/medical waste, air, archaeology, energy, hazardous waste, and petroleum issues associated with the DRI.

Project Manager; Environmental Services, City of Newberry—Providing environmental consulting services to the City of Newberry, Florida, on an as-needed basis. Tasks have included review of a DRI significant deviation for the expansion of Florida Rock cement plant, participation in public hearing and preparing recommendations for long-term environmental monitoring to assess impacts to the environment, review of a permit request for construction of a temporary batch asphalt and concrete plant, coordinating an air toxics monitoring program with FDEP, and providing annual water quality monitoring at the Florida Rock plant site.

Project Scientist; Gainesville Depot Park Site Water Supply Well Survey, Gainesville Regional Utilities—Responsible for reviewing historical records and aerial photographs; and contacting state, water management districts, city, and county agencies to determine the past and present existence and location of water supply wells in the vicinity of the stormwater park. Assisted in the preparation of a report describing all the past and current well locations, and assessing their potential for serving as conduits for the contamination of the Floridan aquifer.

Project Manager; DRI, North Central Florida Regional Planning Council (NCFRPC)—Responsible for review of ecology, geology, hydrology, waste water, stormwater, solid waste, and other sections of the Alachua West DRI submittal. Attended meetings and presentations representing NCFRPC during the various phases of the review process. Became very familiar with the geology, hydrogeology, and potential for aquifer contamination by hazardous wastes from various potential industrial clients of the development.

Project Manager; Remedial Investigations/Feasibility Studies (RI/FSs), U.S. Army Installations—Responsible for managing site investigations including limited sampling and analysis activities and RI/FSs at several U.S. Army installations, including Aberdeen Proving Ground, Maryland; Volunteer Army Ammuni-



tion Plant, Tennessee; Gerstle River Test Site, Alaska; Alabama Army Ammunition Plant, Alabama; and Woodbridge Research Facility, Woodbridge, Virginia. Work was performed for U.S. Army Environmental Center (USAEC), formerly USATHAMA, and Huntsville District U.S. Army Corps of Engineers (USACE).

Project Manager; Hazardous Waste Contamination Survey for the U.S. Army Armament R&D Command, Alabama Army Ammunition Plant—Conducted a comprehensive, multi-media environmental survey and assessment to determine the type and degree of any industrial chemical or explosives contamination from previous plant operation. Responsible for equipment calibration and set-up of large multimedia field sample collection effort in the areas of water, sediment, soils, sewers, and biological and building sampling. Retrieved and reviewed file blueprints to select sampling locations most likely to be contaminated by munitions-type materials. Conducted walkover study to determine extent of asbestos contamination from plant demolition. A comprehensive project quality assurance plan was implemented, using techniques outlined in the USAEC QA Program.

Project Director/Manager; Base Closures, U.S. Air Force—Responsible for managing a multidisciplinary team of engineers and scientists in conducting an environmental review at Sondrestrom Air Base (AB), Greenland, and Cruncher Island, Greenland, to determine the extent of any contamination, propose remedial measures, prepare cost estimates, and to provide technical coordination and project oversight in removing contaminants prior to base closure.

TASK MANAGER—WATER QUALITY AND WATER RESOURCES

1. **Name and Title:** Leland Smith, P.E., D.WRE, Senior Engineer
2. **Job Assignment for Other Projects:** Work assignments include project manager for multidisciplinary project teams, and engineer of record for civil, environmental and water resources design and construction projects. His project experience includes serving in senior project manager and lead design engineer roles in private sector land development and public sector stormwater infrastructure projects.
3. **How Many Years with This Firm:** Employed by ECT for 4 years.
4. **How Many Years with Other Firms:** After graduating with a B.S. degree in 1991 and prior to joining ECT, Mr. Smith was employed for a total of 11 years by other consulting firms, and 5 years by state government environmental agencies.
5. **Experience:** A wide variety of civil, environmental and water resources projects from both regulatory and consulting perspectives. His consulting experience includes 15 years of progressively responsible consulting project management assignments leading locally-, regionally-, and globally-distributed multidisciplinary



teams. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$1.3 million on a large, multi-year environmental management system implementation project. Specific project involvement has typically been as project manager and/or engineer of record.

6. **Education:** M.S. in Civil Engineering
B.S. in Civil Engineering
7. **Active Registrations:** Professional Engineer in Florida, Alabama, Georgia and Idaho; FDEP Qualified Stormwater Management Inspector.
8. **Other Experience and Qualifications Relevant to this Project:** Mr. Smith is the engineering manager in ECT's Tallahassee office, and can be available if needed to meet with Leon County project staff with as little as 15 minutes notice. His experience with surface water quality issues in Florida dates back to his participation in production of the 1988 305(b) water quality report as an OPS environmental specialist working for the Florida Department Environmental Regulation (now FDEP). Mr. Smith has been certified as a Diplomate, Water Resources Engineer (D.WRE) by the American Academy of Water Resources Engineers.

Examples of Mr. Smith's relevant project experience include the following:

Engineer of Record/Project Manager; Avenue C North Drainage Improvements for the City of Carrabelle—Provided construction grant application, engineering design, permitting, bidding and construction phase services for retrofit of existing drainage infrastructure located in the City of Carrabelle to address localized flooding and sediment control issues. Improvements included: (1) replacement of an existing dry detention pond, previously permitted to serve a 7-acre drainage area, with a larger wet detention pond to treat runoff from a 27.5-acre urbanized contributing area; (2) retrofit of an existing, sediment-filled cross-drain with a sediment trap; and (3) stabilization of upstream scour-prone areas to reduce erosion and sedimentation

Engineer of Record/Project Manager; County Road-30A Drainage Improvements for the City of Carrabelle—Provided construction grant application, engineering design, permitting, bidding and construction phase services for replacement and hardening of a failing double 60-inch cross-drain, headwall and endwall system, stabilization of erosion prone areas, and creation of a quiescent pool upstream from the cross-drains to provide for erosion control and sediment removal.

Project Manager, Engineering Services During Construction; Lake Munson Restoration Project, Phase I, for the Leon County Public Works Department—Managed engineering services during construction of this initial phase of the Lake Munson restoration project, which included restoring a filled historical



lakebed to create a 25-acre stormwater attenuation and treatment pond, excavating a 35-acre sediment delta from the bottom of Lake Munson, and restoring 2 miles of eroded channel upstream from Lake Munson by establishing a more stable, vegetated/armored channel. The project also included construction of a system of hydraulic control structures (dams, weirs and gates), restoration of a more natural hydroperiod in wetlands adjacent to the project area, and provisions for removal of sediment and trash.

Project Engineer; ERP Program Support for the NFWMD—Assisted the District with implementation of its Phase I and Phase II ERP program by providing technical reviews of ERP application packages, including performance of ground-truthing inspections, review of construction plans and specifications, stormwater design calculations and related documentation, and preparation of permits for issuance.

Engineer of Record; Engineering and Permitting Services for Dam Overflow Retrofit for Silver Lake Dairy—Provided engineering design and permitting services for a hydraulic control system retrofit, to modify an existing Suwannee River Water Management District (SRWMD) ERP for an earthen dam in Jefferson County, Florida, with a failed overflow system.

Engineer of Record/Project Manager; Engineering and Permitting Services for a Borrow Pit Facility for a private industrial client—Provided engineering design and comprehensive SRWMD ERP services for a 55-acre borrow pit facility in Taylor County, Florida.

TASK MANAGER—HAZARDOUS MATERIALS AND BROWNFIELDS

1. **Name and Title:** Mark Culbreth, P.G.
2. **Job Assignment for Other Projects:** Mr. Culbreth has served in various roles for other projects ranging from project geologist, to project manager, to technical adviser. His years of hands-on experience allow him to understand the technical issues, the regulatory issues, and the client's needs versus desires. His technical specialties include hydrogeology, geochemistry, statistics, and geophysics. He has extensive experience in understanding regulations and representing client's interests with various regulatory agencies. Mr. Culbreth is currently working with the City of Tallahassee assisting them with management of their Brownfields grants and is managing Phase I and Phase II ESAs and evaluating new and existing data to assess the level of naturally occurring arsenic in soils in the Gaines Street area of Tallahassee.
3. **How Many Years with This Firm:** Mr. Culbreth has been with ECT for 18 years.



4. **How Many Years with Other Firms:** Mr. Culbreth has been employed by other firms for a total of 9 years.
5. **Experience:** Mr. Culbreth has extensive experience in Florida working on assessment, and remediation projects involving petroleum and hazardous substances, and ranging in size from a few thousand to over half a million dollars in size. Mr. Culbreth has extensive experience working on projects impacted by chlorinated solvents, manufactured gas plant wastes, pesticides, arsenic, galvanizing wastes, and other hazardous substances. Mr. Culbreth also has experience in working with businesses in solving their waste characterization and management issues. In addition, Mr. Culbreth is actively involved in brownfields project throughout Florida.
6. **Education:** M.S., Geology
B.S., Geology
7. **Active Registration:** Professional Geology license in Florida
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Mr. Culbreth has extensive experience in hazardous materials and brownfields. Examples of Mr. Culbreth's relevant project experience include the following:

Project Director; Programmatic Support for Brownfields Assessment Grant, City of Tallahassee—Provided oversight of programmatic support activities of the Brownfields Assessment Grant for the City of Tallahassee. Programmatic support includes assisting in the preparation of MBE/WBE utilization forms and financial reimbursement forms; drafting U.S. Environmental Protection Agency (EPA) Brownfields Cleanup Quarterly Reports and Performance Evaluation Reports for review; drafting and preparing Quarterly Measures reports required by the terms and conditions of the EPA Cleanup Grants, as necessary; and providing data entry of EPA property profile information into the ACRES database as required by grant's terms and conditions.

Project Quality Assurance Officer and Project Geologist; Brownfields Assessment Grant, City of Tallahassee—Provided review and revision of quality assurance project plan (QAPP), prepared work plans, reviewed field notes and laboratory reports, and prepared the Phase II ESA report for the Art Alley project.

Project Quality Assurance Officer and Project Geologist; Building Deconstruction Project for Former Incinerator Building, City of Tallahassee—Project consisted of deconstruction of the former incinerator building containing residual ash, which had been tested and classified as hazardous. Project was conducted under a RCRA remedial action plan (RAP). Prepared QAPP, and reviewed work plan for characterization of residual ash present in the building for hazardous waste determination. Reviewed analytical data from ash and revised waste de-



termination. Prepared responses to regulatory agency comments regarding waste determination, method of deconstruction, and prepared invoices.

Project Manager; Brownfield Contractor; City of St. Petersburg—Worked with the Economic Development Coordinator for the city, providing programmatic support. Participated in community meetings in addition to conducting 19 Phase I ESAs, preparing 17 health and safety plans, QAPPs, and phase II ESAs. Assessments were conducted on a variety of properties, including former residential, commercial, and industrial properties. Both petroleum and non petroleum sites were assessed.

Project Manager; Phase I/II ESAs for Brownfield Sites, Pinellas County Economic Development—Responsible for Phase I/IIIs on the Gooden Crossing and Korkis properties in the Pinellas County brownfields area.

Project Geologist; Tropicana Field Tampa Bay Devil Rays Baseball Stadium, Former St. Petersburg, Florida Gasification Site Contamination Assessment-Remedial Action, City of St. Petersburg—Performed an investigation to determine the extent of soil and groundwater contamination at a former coal-gas production plant in downtown St. Petersburg, Florida. Contamination at the site was discovered during construction of the Dome Stadium. Investigation included the installation of 21 piezometers and groundwater monitoring wells and the sampling and chemical analysis of soils, sediments, groundwater, and surface water in the vicinity of the site. Based on the results of the contamination assessment, an exposure and risk analysis was performed to assess the potential for effects to human health and the environment. A feasibility study and RAP were developed to remediate site contaminants based on the results of the contamination assessment and risk analysis.

The site cleanup included dewatering, treatment of extracted groundwater, excavation of more than 110,000 cubic yards of coal tars and coal tar contaminated soils, removal of contaminated sediments from an onsite creek, and construction of a lined land treatment cell with leachate collection and treatment. The coal tar contaminated soils are currently undergoing bioremediation treatment in the land treatment facility.

Project Manager; Phase I and II ESAs, Site Assessments, and Remedial Actions, Lowes Home Companies—Provide Phase I and Phase II ESAs, site assessments, and rapid response remedial actions as needed for numerous facilities in Florida. Worked with Lowes real estate group during redevelopment projects by conducting asbestos and lead-based paint surveys prior to demolition of existing facilities. At one site, prepared permit to allow for development on top of a former landfill and conducted methane monitoring of facility after construction.

Project Geologist; Contamination Assessment at Former Coal Gasification Site, Gainesville Regional Utilities—Performed a contamination assessment in-



vestigation at a former coal gasification plant site that had operated from the 1890s to 1960 in Gainesville, Florida. The contamination assessment included the installation of 16 monitoring wells, the drilling of soil test borings, and the collection of groundwater and soil samples for laboratory chemical analyses. The monitoring wells were used to measure water level elevations for determining hydraulic gradients and groundwater flow velocities. A free-product recovery well (6-inch diameter) was installed to recover non-aqueous phase liquid along the southern boundary of the site. Contamination assessment plans, quality assurance (plans and health and safety plans were prepared and approved prior to implementation of the field activities. Technical negotiations and interactions with local and state regulatory agencies were performed during the course of the investigation. A human health and ecological risk assessment and a feasibility study were conducted and approved by the regulatory agencies in support of the preparation of a RAP.

Project Geologist; Chlorinated Solvent Site Assessment, Daytona Beach International Airport, Volusia County—Developed dynamic work plan to evaluate the distribution of chlorinated solvents and assess hydrogeologic factors controlling plume migration at the Daytona Beach International Airport. Implemented work plan and found that chlorinated solvents were preferentially moving along a shell hash varied in depth and thickness across the site and gave the plume an appearance of a diving plume.

TASK MANAGER—REMEDIAL DESIGN AND CONSTRUCTION

1. **Name and Title:** Jim Spinnenweber, P.E.
2. **Job Assignment for Other Projects:** Mr. Spinnenweber has extensive experience in Florida working on remedial design and construction related consulting projects that are relevant to the services proposed to be provided by the ECT project team under this contract.
3. **How Many Years with This Firm:** Mr. Spinnenweber has been with ECT for 2.5 years.
4. **How Many Years with Other Firms:** Mr. Spinnenweber has been employed by other firms for a total of 24 years.
5. **Experience:** Mr. Spinnenweber's qualifications have included the technical areas of construction management, property transaction due diligence, pollution prevention, petroleum & hazardous waste remediation, and water & wastewater design as related to the environmental engineering projects. Mr. Spinnenweber has served as a project manager and senior project engineer on many engineering projects, and currently serves as project manager to numerous remedial engineer-



ing projects throughout the State of Florida. His projects have ranged in size from a few thousand dollars to over \$2 million

6. **Education:** MBA, Management
B.S., Civil Engineering
B.S., Architectural Engineering
7. **Active Registration:** Professional Engineer license in Florida; Certified General Contractor in Florida; Certified Pollutant Storage Contractor in Florida; Certified Wastewater Operator in Florida.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Mr. Spinnenweber has extensive experience in remedial design and construction. Examples of Mr. Spinnenweber's relevant project experience include the following:

Senior Engineer; Petroleum Assessment and Remediation, FDEP Preapproval Program—Designed several remedial action systems involving air sparge and soil vapor extraction in difficult clayey geology ranging from \$200,000 to approximately \$2 million dollars in total cost. Successfully persuaded many FDEP Preapproval Case Managers to change cleanup strategy from natural attenuation monitoring to a more cost-effective active remedial strategy, by conducting a detailed analysis of the historical groundwater monitoring data and using groundwater modeling techniques.

Senior Engineer; Petroleum Assessment and Remediation, Various Commercial Insurance Carriers—Implemented the design of several remedial action systems involving source removals and air sparge and soil vapor extraction systems at sites throughout Florida. Successfully negotiated cleanup strategy with insurance carrier's project managers in implementing the most cost-effective strategy to effectively complete the cleanup project.

Senior Engineer; No. 6 Fuel Oil Release RAP, Confidential Client—Developed a source removal RAP which will involve the excavation and disposal of approximately 8,000 cubic yards of impacted soil in Putnam County, Florida. The design included detailed specifications and procedures to surgically remove all impacted soil located in forested wetlands.

Senior Engineer; Multiple Drycleaner Assessment and Remediation Sites, FDEP—Assisted in the engineering management of several hazardous waste cleanup sites in Florida that were eligible for funding under the FDEP's Drycleaning Solvent Cleanup Program.

Senior Engineer; Multiple Petroleum Assessment and Remediation Sites, FDEP—Lead engineer for all engineering and construction activities throughout Florida and southern Georgia involving petroleum and hazardous waste cleanup



sites. Responsible for the management of 15 performance-based cleanup project for FDEP's Preapproval Petroleum Cleanup Program. Coordinated the activities and job assignments of the engineering group, including the preparation of proposals, pilot test plan development and implementation, remedial action designs, estimating project construction costs, communications with client representatives, and interaction with regulatory managers.

Senior Engineer; Brownfield Development, Private Developer—Initiated a brownfield development application for a large high-rise residential and office condominium project within the downtown Tampa area involving initial presentations to the site developer and negotiations with the environmental regulatory agencies.

Senior Engineer; Multiple Petroleum Assessment and Remediation Sites, 7-Eleven, Inc.—Lead engineer for large convenience store chain assisting in their storage tank compliance issues and design of remediation systems throughout Florida.

Senior Engineer; Multiple Petroleum Assessment and Remediation Sites, FDEP—Lead engineer for all engineering and construction activities throughout Florida and southern Georgia involving petroleum and hazardous waste cleanup sites. Responsible for the management of 15 performance-based cleanup project for FDEP's Preapproval Petroleum Cleanup Program. Coordinated the activities and job assignments of the engineering group, including the preparation of proposals, pilot test plan development and implementation, remedial action designs, estimating project construction costs, communications with client representatives, and interaction with regulatory managers.

Senior Engineer; Multiple Petroleum Assessment and Remediation Sites, Numerous Petroleum Clients—Responsible for coordinating the activities and job assignments of the engineering group including the preparation of proposals, estimating total project life cycle cost, communications with client representatives, and interaction with regulatory managers. Managed the pilot study, design, operation, and optimization of remediation systems installed at retail petroleum sales locations throughout Central and North Florida. Responsible for timely and cost-effective management of numerous Preapproval Petroleum Cleanup work orders and AIG Insurance claim authorizations. Designed and implemented several remedial actions involving excavation, sparging, bio-sparging, chemical oxidation, bioremediation, and dual phase and vapor extraction. Assisted with new business development through County Commission presentations and networking with existing clients and Rotary International Members.

Senior Engineer; Pollution Prevention Project, Florida East Coast Railroad—Negotiated with FDEP in the development of pollution prevention program plans for a large railroad company which offset fines established in Consent Order.



Project Engineer; Onsite Sewage Treatment and Disposal System, Tallahassee East KOA—Designed 5,000 gallons-per-day onsite sewage treatment system for a campground and mobile home park in Monticello, Jefferson County, Florida. Prior to system installation, approval from FDEP was obtained to relinquish their responsibility for the operation of an existing wastewater treatment package plant. Successfully secured a variance approval from the Florida Department of Health to reduce facility flows to below the Chapter 64E-6 requirements using the flow data from the existing wastewater treatment plant (WWTP). The disposal system consisted of a 7,700 square feet pressure dosing drainfield system installed into four zones of a sloping grade.

TASK MANAGER—WETLANDS AND ECOLOGY SERVICES

1. **Name and Title:** Lisa Ricker, PWS, Staff Scientist
2. **Job Assignment for Other Projects:** Ms. Ricker is a senior ecologist and project manager with ECT. She has extensive experience conducting ecological surveys and assessments including wetland delineations, wetland functional assessments using the Uniform Mitigation Assessment Method (UMAM), plant and wildlife threatened and endangered species surveys, vegetation and land-use mapping, and vegetation and wildlife inventories. In addition, Ms. Ricker is highly experienced in preparing ERP applications, including conducting alternatives analyses, finding creative methods for eliminating and reducing impacts, preparing mitigation plans, and coordinating with federal and state regulatory agencies to secure permits. Ms. Ricker is also experienced in providing environmental monitoring during construction to ensure projects are built according to plan and within permit conditions. She has additionally testified as an expert witness in ecological issues for several complex permitting projects.
3. **How Many Years with This Firm:** Ms. Ricker has been with ECT for 8 years.
4. **How Many Years with Other Firms:** Ms. Ricker has been employed by other firms for a total of 7 years.
5. **Experience:** Ms. Ricker's has served as project manager and project scientist on many ecology and wetlands delineation/permitting projects. Her projects have ranged in size from a few thousand dollars to several million dollars.
6. **Education:** M.S., Biology
B.S., Zoology
7. **Active Registration:** Professional Wetland Scientist; Maryland Qualified Environmental Professional.



8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Ms. Ricker will be responsible for coordination of permitting and overall quality management for all ecology services provided by the ECT team under this contract.

Examples of Ms. Ricker's relevant project experience include the following:

Project Manager; SeaCoast Natural Gas Pipeline Project; EMS Land and Environmental Services—Performed wetland delineations, threatened and endangered species surveys, and natural resource inventories for a 50-mile long natural gas pipeline. Prepared USACE and ERP applications for impacts associated with the pipeline project, including crossing the St. Johns River. Prepared alternatives analysis and supporting documentation for crossing state conservation lands.

Ecological Task Manager; Keystone Jacksonville Terminal, Southern Monitoring & Environmental, LLC—Performed wetland delineations, threatened and endangered species survey, and wildlife assessments. Assisted in preparation of impact analysis in support of ERP/USACE permit application preparation for Port dredge project in Jacksonville, Florida. Scope will include acquisition of sovereign submerged lands easement.

Ecological Task Manager; CNX Terminal; Constellation Energy—Assisted in preparation of a Maryland Department of the Environment and USACE permit applications for 50+ foot depth dredge project in Port of Baltimore, Maryland. Scope included baseline and impact assessment for ecological impacts and alternatives analysis.

Assistant Project Manager; Elk City Wind Energy Facility; NextEra Energy Resources. LLC—Performed a critical issues analysis for a +90,000-acre wind resource area in western Oklahoma. Critical issues evaluated included threatened and endangered bird species, native potential bird and bat fatalities from collision with tall structures, loss or fragmentation of habitat, wetland impacts, visual impacts, impacts to cultural resources, and land use/zoning issues.

Ecologist; Mosaic Ona Mine Permitting Project; Mosaic Fertilizer, L.L.C.—Performed wetland functional assessment, using UMAM for 17,000+ acres of land proposed for surface phosphate mining in the Hardee County, Florida. The assessments entailed qualitatively and quantitatively characterizing location and landscape support, water environment, and community structure of each wetland in reference to high quality wetlands of the same type. The project required significant internal and agency coordination to ensure consistency among ecologists and reviewers.



TASK MANAGER—FIELD SERVICES

1. **Name and Title:** Lealy S. Norris
2. **Job Assignment for Other Projects:** Mr. Norris has worked as a project manager, task manager, project scientist, and crew chief on a variety of projects where ecological and field services have been required.
3. **How Many Years with This Firm:** Mr. Norris has been with ECT for 6 years.
4. **How Many Years with Other Firms:** Mr. Norris has been employed by other firms for a total of 22 years.
5. **Experience:** Mr. Norris' project experience includes field sampling activities, equipment operation and maintenance, ESAs, wetland delineations, protected species surveys, GPS mapping, aquatic plant removal, and science diver.
6. **Education:** High school diploma.
7. **Active Registration:** Advanced SCUBA; Florida certified burner, No. 02957; FDEP wetlands delineation; FDEP advanced hydric soils; FDEP stormwater management inspector certification.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Mr. Norris will be responsible for all field services required for tasks assigned under this project.

Examples of Mr. Norris' relevant project experience include the following:

Project Manager; Florida Wildlife Exotic Plant Survey, Florida Fish and Wildlife Commission—Conducted field surveys of two wildlife management areas in Taylor County, Florida, to identify and map exotic plant occurrences.

Task Manager; Invasive/Exotic Plant Survey, Leon County—Conducted field survey on 215 acres. Prepared results report along with technical specification on management of species documented during survey.

Task Manager; Field Services for Taylor Energy Center Project Power Plant and Transmission Siting for Florida Municipal Power Authority, Sargent & Lundy—Responsible for field sampling of soil and water. Also assisted in wetlands evaluation and ecological studies for a proposed power plant site in Taylor County, Florida.

Assistant Project Manager; Tillie Miller Park, City of Carrabelle—Worked closely with City officials and public in the design and renovation to local



recreation park. Coordinated with engineers and contractors on all areas related to construction. Prepared bid packages.

Project Scientist; Environmental Services, Leon County—Conducted ecology, wetlands, and other environmental tasks.

Crew Chief; Wetlands Delineation and Mapping—Supervised crews conducting wetlands delineation and mapping on many Florida panhandles sites.

Crew Chief; State, County, and Local Survey Firms—Team leader on boundaries, topographic, tree, and plant identification work.

Project Manager; Wetlands Management, SGI Land Company, LLC—Worked with client to negotiate with the City of Carrabelle on best management of wetlands located on property proposed for future urban housing project. Worked with client's engineering firm to develop native landscaping plan for subject property. Liaison between city and client in permitting issues.

Assistant Project Manager; Carrabelle Wharf, City of Carrabelle—Attend all public and government meetings to help in the design of a new riverfront recreation area of the City of Carrabelle, Florida. Conduct and coordinate all field sampling. Prepare necessary permit applications and bid packages. Provide construction oversight, as needed.

Project Scientist; Environmental Services, City of Tallahassee—Conducted wetland delineations, Phase I/II environmental site assessments, water quality monitoring, and other environmental tasks.

Assistant Project Manager; Field Studies, City of Carrabelle—Design and construction of a city park and marina. Project included surveying, public meetings, water and sediment sampling, and a tidal current study.

Park Ranger; FDEP—Park guide on Wakulla River for over 6 years. Led many guided hike and boat tours in and along the Wakulla River. Lead ranger on many resource management projects to include prescribed fire and exotic plant removal.

TASK MANAGER—GIS/CADD

1. **Name and Title:** Maria Cruz
2. **Job Assignment for Other Projects:** Work assignments have included GIS specialist, web mapping developer, database developer, computer programmer, and manager of the GIS/CAD department.
3. **How Many Years with This Firm:** Ms. Cruz has been with ECT for 12 years.



4. **How Many Years with Other Firms:** Ms. Cruz has been employed by other firms for a total of 13 years.
5. **Experience:** Ms. Cruz's project experience includes GPS/GIS inventory and management, and 15 years of web and database design and development. She is experienced in developing GIS databases to analyze and perform tasks, such as: raster analysis, phase I site studies, thematic mapping (such as land use, soils, zoning, etc), parcel mapping, wetlands mapping, and land use planning, among others. Ms. Cruz has also developed multiple web mapping applications for the company, incorporating the new Google Map technology, providing the client with the user experience of a Google map.
6. **Education:** B.S., Business Administration/CIS
7. **Active Registration:** MCP NT 4.0 certification, No. 2073467; Security+™ Certified Professional
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Ms. Cruz will be responsible for coordination and overall quality management for all GIS and CADD services provided by ECT and its subcontractors

Examples of Ms. Cruz's relevant project experience include the following:

Web Mapping Developer; Website Development, SWFWMD—Developed a web-based demo site for SWFWMD (www.ectmapping.com) to display watershed and floodplain data. The application displays imagery, roadways, FEMA, and parcel information for Pasco County. The application provides a search function to locate and display parcel information by first and/or last name. The website can be accessed and viewed by the general public.

GIS Specialist; Kemper Lignite Mine and Transmission lines, Southern Company Services, Inc.—Managed and prepared various GIS and CAD maps for multiple corridors for Mississippi Power's proposed gas transmission pipeline and electrical transmission lines in Kemper, Lauderdale, Jasper, and Clarke Counties, Mississippi. Generated data set to determine and analyze impacted and non-impacted wetlands, upland forests, land use, construction impacts, and length of collocated facilities.

GIS Specialist; SeaCoast Natural Gas Transmission Pipeline, TECO Peoples Gas—Prepared various GIS maps for multiple corridors for TECO Peoples Gas proposed gas transmission pipeline in Clay, Duval, and St. Johns Counties, Florida. Generated data sets, from GPS data, and used for analysis of the following: impact on wetlands, parcel proximity, collocated facilities, and structure counts.



Web Mapping Developer; Florida Power & Light Company (FPL)—Developed a web mapping application, with embedded Google maps, to locate and display distance measurements from a specified address (or click on the map) to the routes proposed for over 100 miles of new transmission lines denoted on the map. The software used was Google Maps API, JavaScript and HTML/CSS. This web site was developed specifically for FPL for their Turkey Point Nuclear Project and is publicly accessible. (www.ectincmap.com/FLviewerT.html).

GIS Specialist; Florida Municipal Power Authority, Sargent and Lundy—Created several general location and operational maps for site analysis. Collected data and prepared land/vegetation, wetlands and potential construction impacts maps.

GIS Specialist; St. Johns Pellicer-Pringle 230-kV Transmission Corridor, FPL—Prepared maps, integrated data from several sources, and manipulated photographic and satellite imagery with ArcGIS 9.x, AutoCAD Map, and Raster Design. Collected data and prepared maps for land/vegetation, construction impacts, wetlands and other geographic features. Performed spatial proximity analysis to score best suitable corridor based upon proximity of specific features. Prepared series of maps for licensing applications, and map boards for public hearings.

GIS Specialist; Site Analysis and Licensing for Taylor Energy Center, Sargent & Lundy—Delineated over 900 acres of wetlands from GPS points collected from the field, and integrated with other GIS data. Collected, calculated and mapped data for land/vegetation, construction impacts, wetlands and other geographic features.

Web Mapping Developer; Confidential Client—Deployed web-based GIS mapping application for ECT marketing team, with the potential of identifying and tracking potential projects and efforts in Florida. Duties entailed developing the web application to serve and display graphic and database attribute information for ECT authorized staff. Web mapping software used is UNM's Mapserver. Programming languages include HTML/CSS, CGI, Javascript and PHP. Current efforts entail re-writing the web application with PHP, under Mapserver/Mapscript for advanced mapping functionality.

Access/VBA Database Programmer—Developed a linear corridor assessment model in PC-based MS Access/VBA (called Segment Manager and Analyzer [SMA]) for in-house evaluation of large numbers of route alternatives for power clients. This proprietary program identifies all route permutations, calculates all route total scores for the criteria evaluated, allows for weighting of the criteria, and ranks the routes based on weighted criteria.

GIS Specialist; Site Study, Edison Mission Energy—Assembled numerous GIS maps to identify initial potential sites based on regional reviews across the state of Illinois (preliminary transmission flow modeling, review of sequestration poten-



tial, and review of operating and proposed mines); then narrowed the field down for further detailed evaluation.

GIS Specialist; Numerous Clients—Collected data, such as 2004 digital ortho quarter quads, USGS quad maps, National Wetland Inventory, Florida Geographic Data Library, and GPS survey information to generate cartographic maps. Converted AutoCAD data to GIS format for analytical use. Generated thematic maps and general location maps for use in proposals, presentations, public hearings, etc.

GIS/AutoCAD Specialist; Kelson Ridge Power Plant, Reliant Energy—Prepared aerial maps and other documentation for land use, wetlands, soils, floodplains, and other areas necessary for the certificate of public convenience and necessity studies associated with the proposed 1,650-MW facility located in Charles County, Maryland. Worked with state and county agencies to obtain land use and environmental data.



ENV-A.3. Outside Consultants Anticipated to be Used on this Project

ECT anticipates a potential need for subconsultants on this project and has identified the following companies to provide services:

Geotechnical investigations, testing and consulting

Environmental & Geotechnical Specialists, Inc. (WBE)
3154 Eliza Road
Tallahassee, Florida 32308



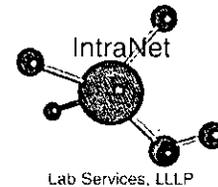
Tank Removal, Contaminated Soil Excavation and Remedial Construction

Big Bend Environmental Services
1445 Scotland Road
Havana, Florida 32333



Laboratory Analytical Services

IntraNet Lab services, LLLP (WBE)
3838 Killearn Court
Tallahassee, FL 32309



Surveying

Diversified Design and Drafting, Inc. (WBE)
2840 Pablo Avenue
Tallahassee, Florida 32308



Thurman Roddenberry & Associates, Inc.
125 Sheldon Street
Sopchoppy, Florida 32358



Landscape architecture, certified arborist services, display graphics

Cowles Landscape Architecture
2285 Trescott Drive
Tallahassee, FL 32308





Landscape services

Rex Shiver Landscaping, Inc.
1055 Scotland Road
Havana, FL 32333



P.O. Box 2327 Havana, Florida 32333-1622
1055 Scotland Road Havana, Florida 32333

Vegetative Management Services

Southeastern ChemTreat
5650 NW 135th St
Chiefland, FL 32626



Archaeology support

Archaeological Consultants, Inc. (WBE)
98 Hickory Wood Drive
Crawfordville, FL 32327



Several of the above firms are either MBE or WBE certified by the Leon County, City of Tallahassee, or the State of Florida (see Appendix C). Although there is no MBE/WBE target prescribed by Leon County for this project, ECT acknowledges that each respondent is strongly encouraged to secure MBE and WBE participation through the purchase of those goods or services when opportunities are available.

Additional or alternate outside consultant firms may be used for this project, subject to approval by Leon County.



ENV-B. EXPERIENCE WITH PROJECTS OF A SIMILAR TYPE AND SIZE

ENV-B.1. Projects Illustrating Experience of Firm and Staff

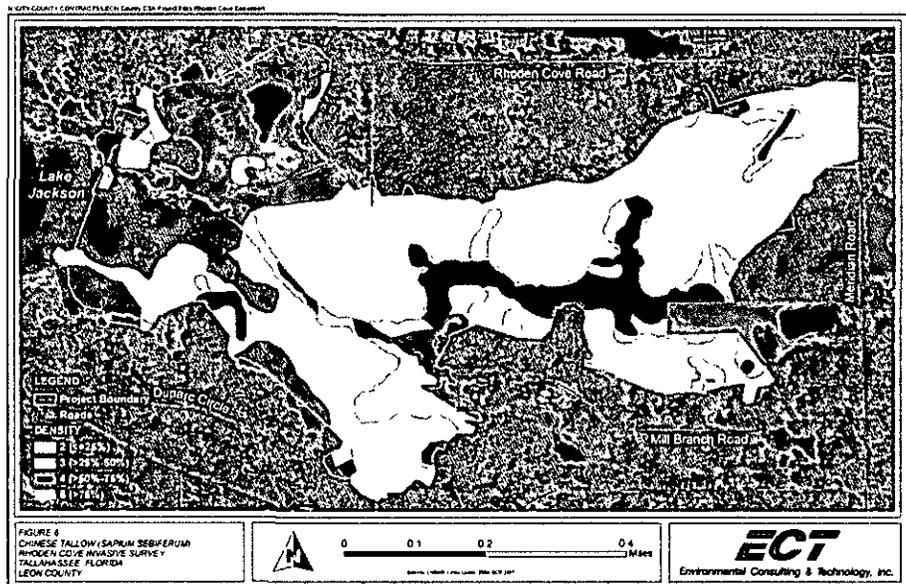
In this section, ECT presents ten projects, completed within the past 5 years, which illustrate relevant experience of the firm and current staff which are to be assigned to the project.

**PROJECT NO. 1—INVASIVE SPECIES/ECOSYSTEMS RESTORATION
OF RHODEN COVE BASIN FOR LEON COUNTY**

HIGHLIGHTS:

<ul style="list-style-type: none"> ■ <i>Public works project</i> ■ <i>Invasive species mapping and eradication</i> ■ <i>GIS/CADD mapping</i> 	<ul style="list-style-type: none"> ■ <i>Environmental permitting</i> ■ <i>Public meetings</i> ■ <i>Ecological restoration</i>
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Rhoden Cove basin, located in northern Leon County, Florida, is a major drainage basin discharging into Lake Jackson. Leon County Public Works has identified the basin as a significant contributor to the spread of invasive plant species. The basin area is approximately 215 acres and is mostly in private ownership. Currently, there is no formal land management plan to control the spread of invasive plants within the basin.



Under its continuing services agreement with Leon County, ECT has provided land management services, permitting, environmental consulting services, and restoration oversight to assist in making the following improvements to Rhoden Cove basin:

1. Using GIS/GPS mapping identified all listed invasive exotic plants present onsite by type and amount.
2. Produced a report with finding and recommendations for the removal of invasive plants found as well as recommendations for restoration efforts.
3. Prepared all bid documents needed to obtain a competitive price to implement recommendations.



4. Obtained permits from and Leon County Growth Management for application of herbicides.
5. Attended public meeting to answer all questions of stakeholders.
6. Supervised contractors during eradication and replanting stages of the project.
7. Provided documentation throughout project with photographs and reports to support grant requirements.

ADDITIONAL INFORMATION:

LOCATION:	Tallahassee, Florida
CLIENT:	Leon County Public Works
ADDRESS:	2280 Miccusukee Rd. Tallahassee, Florida 32308 Felton Ard, Project Manager, 850 • 606-1515
CONTRACT PERIOD:	November 2006—June 2010
CONTRACT AMOUNT:	\$400,000 (grant) \$400,000 (City match) \$262,148 (ECT fees)

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ Ronald R. Potts, P.G., P.E.—Project Manager
■ Lee S. Norris—Environmental Scientist

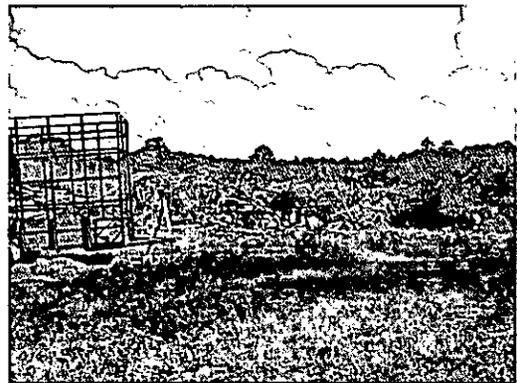


PROJECT NO. 2—PHASE I AND II ENVIRONMENTAL SITE ASSESSMENT GHAZVINI TRACT FOR LEON COUNTY, FLORIDA

HIGHLIGHTS:

- Phase I ESA
- Meetings with state and county officials
- Geotechnical investigation
- Construction and demolition debris landfill
- Phase II ESA
- Environmental sampling
- Monitoring wells

Through a Continuing Services Agreement, ECT has provided Leon County with a Phase I and II ESA of the Ghazvini Tract in northwestern Leon County. The purpose of the proposed land purchase is to establish protection for a sinkhole that connects to the drinking water aquifer, and to also provide Leon County with a nature park. The Phase I ESA revealed that the property was a former construction and demolition debris (C&D) landfill from the 1970s to 1990s. Tree debris was the primary component of the landfill although a significant quantity of concrete and asphalt debris was also present. A large central debris mound occupied the central part of the 78-acre parcel.



The Phase II ESA scope of work screened for hazardous materials and assessed the preliminary quantity and type of materials buried at the subject property. Soil, sediment, surface water, and groundwater samples were collected and analyzed. Soil samples were collected using hand augers, grab samples, soil borings using a drill rig, and trench pits using a back hoe. Sediment samples from beneath water bodies were collected using a dredge sampler or a grab sample. Groundwater samples were collected from three monitoring wells installed at the site.



Man-made berms and drainage ditches have altered the surface hydrology to divert the stream and to drain the property. Soil types and plant species observed at the site indicate that the property was at one time primarily a floodplain wetland/floodplain forest. Numerous invasive exotic species identified at the site have led to a degradation of the natural habitat.

A geotechnical investigation was conducted to aid in developing foundation costs for subdivision construction. The investigation took place at the large debris mound in the center of the property. This was necessary for assessing the market value of the property. The presence of subsurface biodegradable debris presents foundation hazards for housing units and roads.



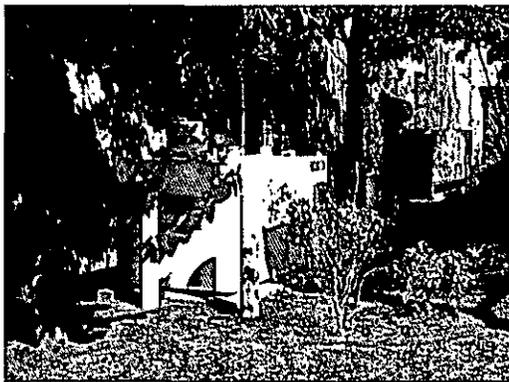
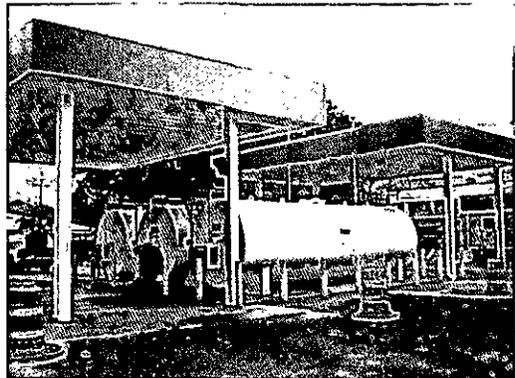
PROJECT NO. 3—FUEL STORAGE TANK DESIGN AND UPGRADES FOR LEON COUNTY, FLORIDA

HIGHLIGHTS:

- Engineering design
- City permitting
- Regulatory interface—FDEP
- Preparation of state-required reports
- Bid package preparation
- Construction oversight
- Storage system closures
- UST/AST system removal

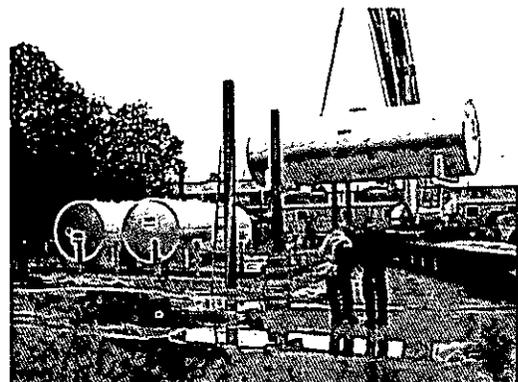
Through a Continuing Services Agreement, ECT has provided Leon County with engineering design specifications and specifications/bid packages for three storage tank facilities. The downtown Public Library required the closure of a 500-gallon UST that provided diesel fuel for an emergency generator and the tank and piping design for an AST system of similar volume.

The Sheriff's Department fueling facility required the closure of an existing 15,000-gallon UST and the tank, piping, dispenser, and canopy design for three 10,000-gallon ASTs and dispensers that will contain gasoline and diesel fuel.



The Leon County Courthouse required the design and specifications for a sealant along the floor and walls of the vault to provide a sealed volume of at least 110 percent of the total volume of the tanks. The facility contained two 7,500-gallon tanks, located in a concrete vault in the underground parking structure of the building. The tanks are used to store and provide diesel fuel for emergency generators for the Courthouse.

Upon the award of the bid package, ECT provided construction oversight and environmental services for the removal and closure of the USTs and the construction of the new ASTs. Other services provided included property surveys, a geotechnical foundation investigation, obtaining city environmental and construction permits, and meetings with state regulators. ECT documented each step of the process and provided required documentation and reports to the FDEP for this project.





ADDITIONAL INFORMATION:

LOCATION:	Tallahassee, Florida
CLIENT:	Leon County Department of Management Services Division of Facilities Management
ADDRESS:	1907 South Monroe Street Tallahassee, Florida 32301
CONTACT:	Albert Sessions, Project Manager, 850 • 606-5000
CONTRACT PERIOD:	December 2006—March 2008
CONTRACT AMOUNT:	\$370,000 (Construction) \$69,394 (ECT fees)

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- Ronald R. Potts, P.G., P.E.—Project Manager
- Barry Westmark, P.E. Project Engineer

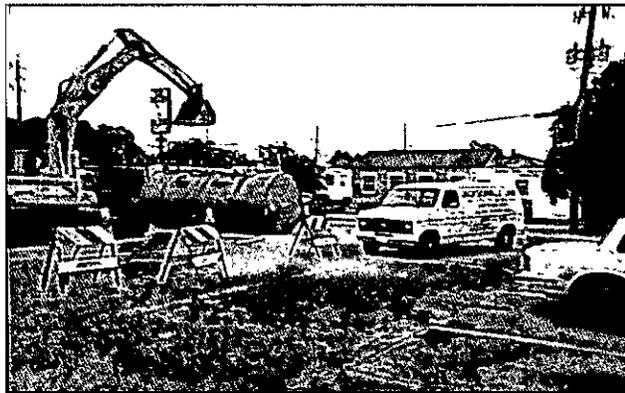


PROJECT NO. 4—THE PANTRY UST PROGRAM

HIGHLIGHTS:

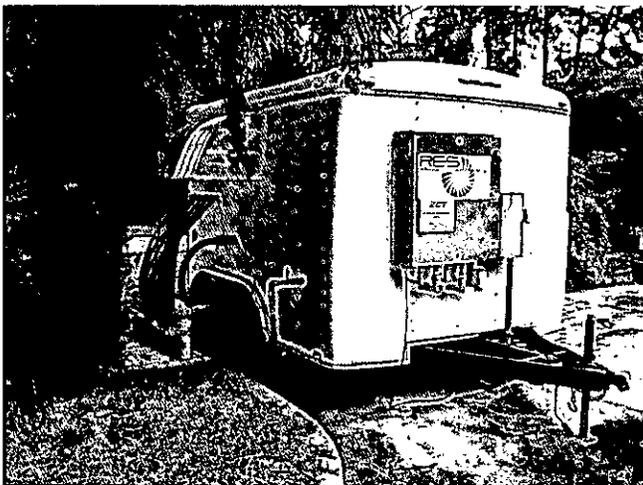
- *Underground storage tank management*
- *Groundwater impact assessments*
- *Monitoring wells*
- *Remedial action plans*
- *Innovative technology—
Dynamox bioremediation*
- *Contamination assessments*
- *Soil and groundwater remediation*
- *Natural attenuation*
- *Contaminated soil removal and disposal*
- *Soil vapor extraction*
- *Petroleum storage and handling*

Since 1998, ECT has completed contamination assessments, prepared RAPs, and conducted remedial actions at hundreds of convenience store petroleum sites in Georgia and Florida branded as Pantry, Lil' Champ, Kangaroo, Handy Way, and Sprint Food Stores. In addition to assessment and remediation services, ECT has provided emergency response, asbestos remediation, and Phase I environmental site assessment services for the acquisition or divestment of stores for The Pantry, Inc.



Underground storage tank removal

Contamination assessments have included installation of shallow aquifer monitoring wells; vertical extent double and triple cased monitoring wells; use of geoprobe drilling services to conduct rapid assessments of the soil and groundwater at a site; and the collection and analysis of soil, groundwater, and air samples. Soil and groundwater remedial actions have included pump and treat, activated carbon, air sparge/soil vapor extraction, multiphase extraction, biosparge, use of biological or chemical catalysts, excavation and thermal treatment of contaminated soils, and natural attenuation.



Groundwater remediation system

ECT subcontracts the installation of monitoring and remediation system wells, excavation of tanks and contaminated soils, transport of soils and contaminated materials, and the construction of some remediation systems. ECT project managers, site supervisors, or hydrogeologists manage and/or monitor the construction phases of the numerous tasks. ECT also provides operation and maintenance of the remediation systems and the preparation of progress reports.



ADDITIONAL INFORMATION:

LOCATION:	Numerous sites in Florida and Georgia
CLIENT:	The Pantry, Inc.
ADDRESS:	305 Gregson Drive Cary, NC 27511 Brent Puzak, 919 • 774-6700, ext. 5206
PROJECT NUMBER:	Numerous
CONTRACT PERIOD:	April 1998 through Ongoing
CONTRACT AMOUNT:	\$10,558,853 (to date)

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- **Larry J. Danek, Ph.D.—Program Director**
- **Jeffrey L. Wahl, P.G.—Program Manager**
- **Jim N. Spinnenweber, P.E.—Project Manager/Project Engineer**
- **Susan M. McConnell, LEP—Project Manager**



PROJECT NO. 5—CONTAMINATION ASSESSMENT AND REMEDIATION SERVICES FOR THE CITY OF TALLAHASSEE POLICE DEPARTMENT

HIGHLIGHTS:

- Contamination assessment
- Remedial action plan
- Remediation design
- Air-sparge system installation and operation

ECT was designated the petroleum cleanup contractor by the City of Tallahassee under the FDEP Petroleum Preapproval Cleanup Program. ECT conducted a contamination assessment and remediation activities at City of Tallahassee Police Department in Tallahassee, Florida, under the requirements of Chapter 62-770, F.A.C. and the FDEP guidelines.



The contamination assessment included the installation and sampling of monitoring wells, the collection of soil samples, and the development of a site assessment report (SAR). Following approval of the SAR, ECT prepared a limited scope remedial action plan (LSRAP) that proposed remediation using air-sparging.

Following approval of the LSRAP by FDEP, ECT supervised the remedial system installation activities. The activities included installation of four sparge wells using a truck-mounted drill rig and connecting the sparge wells to the remedial trailer with PVC piping. Air was injected into the sparge wells to oxygenate the groundwater and dissolve volatile organic aromatics. The remedial system was operated for a period of 1 year followed by post remedial monitoring. A rebound of contaminant concentrations was detected in the post remedial monitoring period. Short-term sparging was conducted (1-day) followed by a year of post remedial monitoring. The contaminants of concern remained below the cleanup target levels during the post remedial monitoring and the No Further Action criteria was achieved. The FDEP issued a Site Rehabilitation Completion Order for the site on June 30, 2010.



ADDITIONAL INFORMATION:

LOCATION:	<i>Tallahassee, Florida</i>
CLIENT:	<i>City of Tallahassee 300 South Adams Street Tallahassee, Florida 32301</i>
CONTACT:	<i>Hal Avery 850 • 891-8932</i>
PROJECT NUMBER:	<i>Numerous</i>
CONTRACT PERIOD:	<i>June 2000—June 2010</i>
CONTRACT AMOUNT:	<i>\$176,500</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- *Susan M. McConnell, LEP—Project Manager*
- *Ronald R. Potts, P.G., P.E.—Engineer of Record*



PROJECT NO. 6—INDOOR AIR QUALITY SCREENING FOR FLORIDA DEPARTMENT OF TRANSPORTATION

HIGHLIGHTS:

- Indoor air quality screening
- Visual inspection of ventilation system
- Collected biological samples
- Interview occupants
- Collected environmental parameters

ECT conducted an initial indoor air quality screening for the Florida Department of Transportation (FDOT). ECT screened the approximately 4,000-square-foot space occupied by the Office of Information Services located in a three-story building in Fort Lauderdale, Broward County, Florida. ECT was asked to perform this screening due to reports of FDOT employee complaints that could be related to indoor air quality.

ECT interviewed occupants of the space, performed a visual inspection of the mechanical ventilation system, collected standard environmental parameters, and collected biological samples.

Based upon observations, visual inspections of the subject area, and laboratory analytical results, ECT concluded the following:



- Carbon dioxide concentrations within the subject area were acceptable according to American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) standards.
- Temperature and relative humidity were acceptable with respect to ASHRAE standards.
- The number of occupants per unit area was acceptable according to published guidelines.
- Viable and non-viable microbiological air sampling indicated that bioamplification was occurring within the supply air duct for the specific air-handling unit.
- Volatile organic compounds detected were significantly below accepted published guidelines (National Institute of Occupational Safety and Health and Occupational Safety and Health Administration).

In 2003, ECT collected nine viable and nonviable air samples randomly selected for the District IV building. Samples were required for annual screening to verify properly operating HVAC system. In 2004, four air samples were collected for VOC, formaldehyde, and microbiological analysis. In 2006, 14 air samples were collected within the multi-story building. Samples were collected for viable and nonviable fungal analysis. In 2007, limited sampling was conducted in one area of potential concern.



ADDITIONAL INFORMATION:

LOCATION: Fort Lauderdale, Florida
CLIENT: Florida Department of Transportation
ADDRESS: 3400 West Commercial Boulevard
Fort Lauderdale, FL 33309
Mr. Neil Villena, 954 • 777-4096
CONTRACT PERIOD: February 2002 to November 2007
CONTRACT AMOUNT: \$24,293

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ Michael C. Duvall, P.G.—Project Manager



PROJECT NO. 7—PROFESSIONAL SERVICES IN SUPPORT OF ENVIRONMENTAL RESOURCE PERMITTING PROGRAM FOR NFWFMD

HIGHLIGHTS:

- ERP permit application reviews
- Technical reviews of drainage
- Calculations, geotechnical reports and other supporting information
- Permit application site inspections
- Technical reviews of construction drawings
- Other services as needed
- Wetlands delineation and assessment

ECT is providing ERP application reviews and other services. ECT is currently in the third year of a continuing services contract with the District and is utilizing employees with relevant experience from multiple office locations throughout Florida. This contract allows ECT scientists and engineers to provide a wide variety of services to the District. Services provided to date under this contract include the following:



- Administrative reviews of permit applications to determine completeness.
- Technical reviews of construction drawings, drainage calculations and stormwater modeling reports.
- Technical reviews of wetland impacts and assessment/mitigation reports.
- Site inspections to evaluate pre-development conditions and gather site information of engineering and ecological relevance to permit reviews.

ADDITIONAL INFORMATION:

LOCATION:	<i>All Counties within the District Boundaries</i>
CLIENT:	<i>Northwest Florida Water Management District</i>
ADDRESS:	<i>Bureau of Environmental Resource Regulation The Delaney Center, Suite 2-D 2252 Killearn Center Boulevard Tallahassee, FL 32309</i>
CONTACT:	<i>Lee Marchman, P.E., 850 • 921-2986</i>
CONTRACT PERIOD:	<i>October 2007—Ongoing</i>
CONTRACT AMOUNT:	<i>\$286,679 (to date)</i>

- ECT PERSONNEL ASSIGNED TO THE PROJECT:**
- *Ronald R. Potts, P.E., P.G.—Project Manager*
 - *Lee A. Smith, P.E.—Permit Reviewer, engineering*
 - *Ivan B. Chou, P.E.—Permit Reviewer, engineering*
 - *Gary R. Cook—Permit Reviewer, engineering*
 - *Maya R. Scohier—Permit Reviewer, wetlands*
 - *Lisa D. Ricker—Permit Reviewer, wetlands*
 - *Lealy S. Norris—Wetlands Field Inspections*



PROJECT NO. 8—PATTON PARK LANDSCAPE IMPROVEMENTS FOR THE CITY OF CARRABELLE

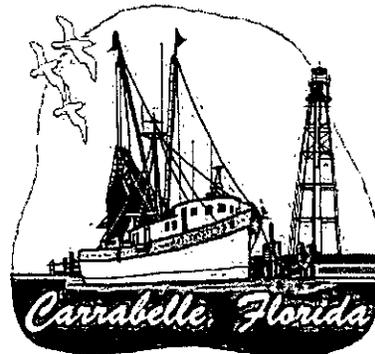
HIGHLIGHTS:

- Site flora evaluation
- Landscape design
- Plant installation and oversight
- Design and construction of irrigation system

Patton Park, a 54-acre wildlife park the City of Carrabelle, was purchased in 2006 through a Department of Housing and Urban Development-Community Development Block Grant/Economic Development Initiative. The city's plan was to provide natural open spaces for wildlife viewing, while maintaining little or no environmental impact to the surrounding landforms. ECT provided assistance to the city to enhance the native flora within the park.

Under its continuing services agreement with the City of Carrabelle, ECT provided enhancements to already existing facilities located in the park including:

1. Evaluated existing native flora present in the park.
2. Provided recommendations to the City for the most effective way to enhance not only the habitat, but also the esthetics of the park.
3. Provided landscape design for a 5,000-square-foot native demonstration garden.
4. Located and purchased all needed materials for a sustainable garden that will be low maintenance and provide for wildlife viewing and a seed bank to further the flora.
5. Installed plants and irrigation system, and assisted in the supervision of State of Florida Department of Corrections crews in the garden.





ADDITIONAL INFORMATION:

LOCATION:	<i>Carrabelle, Florida</i>
CLIENT:	<i>City of Carrabelle</i>
ADDRESS:	<i>106 Avenue B South Carrabelle, Florida 32322 John McInnis, City Manager, 850 • 697-2727</i>
CONTRACT PERIOD:	<i>March 2008—June 2008</i>
CONTRACT AMOUNT:	<i>\$14,050</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Lee S. Norris—Project Manager</i>

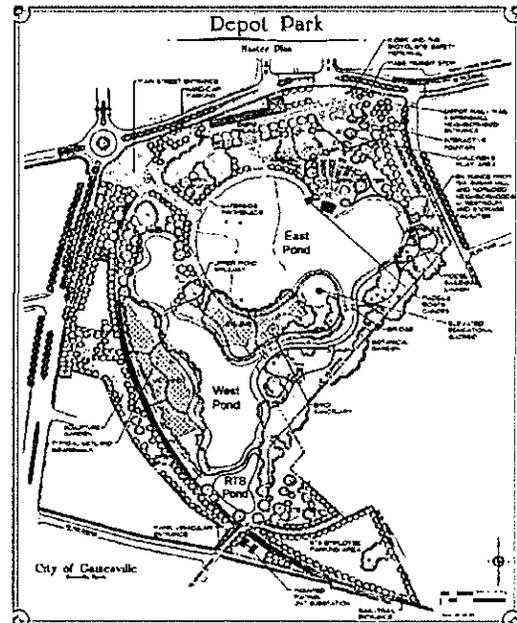


PROJECT NO. 9—GAINESVILLE DEPOT PARK BROWNFIELD CONTAMINATION ASSESSMENT AND REMEDIATION CONSULTING SERVICES

HIGHLIGHTS:

- Phase I environmental site assessment
- Planning and permitting
- Special environmental studies
- Attend meetings representing the city
- Contaminated soil/sediment assessment
- Stormwater design engineering
- Park design and construction
- Remedial action plan
- Wetlands delineation and mitigation
- Threatened/endangered and listed species surveys
- Coordinate with environmental agencies for the city
- Remediation of contaminated soil and sediment

The City of Gainesville was awarded a Regional Brownfield Pilot project grant in 1996 by EPA, Region 4. The brownfield site, located in the vicinity of Depot Avenue in downtown Gainesville, consisted of a 32-acre tract of land with several landowners and several former sources of contamination (gas stations, cement plant, other industrial operations, petroleum tank farms, manufactured gas plant [MGP], and potentially others). The primary contamination source at the site was coal tar residues from the former MGP. ECT was awarded a contract to characterize the complex site, identify the various sources of contamination and extent of soil and groundwater contamination, and prepare a RAP to remediate the site. In addition, the city wanted ponds designed for the site to capture and treat stormwater from an 89-acre area in downtown Gainesville. When all remediation is completed, the city also plans to convert the area into a park site with landscaping, cycling, walking, and jogging trails; a museum in the old train depot building; and other amenities. Due to the complexity of the site, including the funding sources, ECT has completed many tasks at the site since 1996. These tasks include the following.



Artist's concept of park after
remediation and restoration

Under Task 1, ECT completed a Phase I ESA of the site in addition to completing all of the required studies necessary for obtaining an environmental resource permit. These studies included wetland delineations, rare and threatened species surveys, tree surveys, archaeology surveys, etc. \$48,281

Under Task 2, ECT installed monitoring wells, collected soil and water samples, and completed contamination assessments and risk assessments to determine the extent of contamination and define soil cleanup target levels (SCTLs) for this very complex site. Task 2 was completed in 2005 at a cost of \$942,276.



Under Task 3, an engineering feasibility study and an alternatives analysis were completed and submitted. ECT presented reports of all of the work items during several public hearings and meetings with various stakeholders. Task 3 was completed for a cost of \$236,984.

Under Task 4, a preliminary RAP was prepared and submitted. The remedial action was selected by the city, Alachua County environmental agency, and the FDEP, with participation by ECT. The total cost for Task 4 was \$134,343.

RAPs were also prepared for separate phases of the project. Under Task 5, the cost to complete was \$254,838.

Under Task 6, remediation, the first phase consisted of excavation and remediation of soils and contaminated groundwater associated with the Akira Wood site. Coal tar impacted soils (1,914 tons) were removed and transported to an approved landfill. Contaminated groundwater (188,000 gallons) was disposed of in the city's WWTP. During the next phase, 4,856 tons of petroleum-contaminated soils and 100,000 gallons of groundwater were removed and treated. The groundwater treatment system consisted of sand beds followed by activated carbon. During the next phase, excavation of the westernmost stormwater basin, a total of 5,700 tons of soil contaminated with petroleum and coal tar residues were transported and disposed of at an approved landfill. Over 9 million gallons of contaminated groundwater was treated onsite by sand filtration and activated carbon prior to disposal in the city's WWTP. Task 6 work was completed in 2006 for \$511,902.

Under Task 7, the RAP for the next phase was submitted to the State for approval. This plan called for the excavation of petroleum- and coal tar-contaminated soils followed by onsite thermal treatment. It was estimated that 170,000 tons of soil would need to be treated. Contaminated groundwater at the site was proposed to again be treated by sand filtration and activated carbon system. A National Pollutant Discharge Elimination System permit was prepared and obtained for discharging a portion of the treated effluent to Sweetwater Branch and subsequently to Paynes Prairie. Additional effluent was planned to be discharged to the City's WWTP. It was estimated that 30 to 40 million gallons of contaminated groundwater would require treatment. \$809,252

ECT subsequently initiated a pilot scale test to evaluate the effectiveness of the thermal treatment system. The pilot testing failed due to the extremely high BTU content of the contaminated soil. The treatment method proposed in the RFP was modified to include excavation and hauling to an approved landfill.

ECT is currently completing remediation at the Poole Roofing area and to the south of Depot Avenue. The area being remediated has been excavated to a depth of 40 feet. The remediation area is dewatered through 106 wells surrounding the area at a pumping rate of 300 gallons per minute (>432,000 gallons per day). An additional dewatering pump has also been installed to remove excess seepage from a sump constructed in the main excavation area. Water recovered from the dewatering system is processed through sand filters and activated carbon prior to discharge to Sweetwater Branch. Contaminated soils removed from the site are transported to an approved landfill for disposal. The cost of this phase, including additional remediation and lake construction to be completed south of the current site, exceeds \$17,000,000.



All work has been completed in compliance with the ECT site-specific health and safety plan and the State QA/QC guidelines. ECT also provided final engineering designs for the Depot Avenue reconstruction and construction oversight during the final remediation and restoration phases. The ultimate goal for the site is remediation, restoration, and conversion into a park that will treat stormwater and also provide a recreation hub to help revitalize the city's east side.

Water Resources

As an integral part of the site restoration, ECT is in the process of designing a regional stormwater park. ECT engineers performed a thorough inventory of downtown Gainesville to determine potential offsite areas for inclusion in the regional treatment system. Upon completion of the inventory ECT engineers developed a basin plan and model using EPA SWMM. The results of this plan demonstrated that the park would have the capacity to treat runoff from approximately 89 acres of downtown Gainesville, with runoff from 47 acres flowing to the park through the storm sewer system and runoff from the remaining 42 acres re-routed from the adjacent Sweetwater Branch Creek. The park itself will consist of a treatment train approach. The first step in the treatment train will be pretreatment provide by a 10- by 16-foot second generation baffle box. The second step in the treatment train process will be performed by two wet detention ponds in series. These wetland ponds are connected by a braided wetland stream that will provide additional water quality treatment. These ponds will be lined to prevent potential groundwater contamination from entering the ponds. Lastly, the water will flow through a preserved onsite wetland for the final step in the treatment train. \$294,362

ADDITIONAL INFORMATION:

LOCATION:	Gainesville, Florida
CLIENT:	City of Gainesville
ADDRESS:	P.O. Box 490, MS 58 Gainesville, FL 32602-0490 Mr. Stewart E. Pearson, P.E., 352 • 334-5072 Mr. John Veilleux, P.E., 352 • 393-8418
CONTRACT PERIOD:	January 2000 to Ongoing
CONTRACT AMOUNT:	\$20,000,000

- ECT PERSONNEL ASSIGNED TO THE PROJECT:**
- **Larry J. Danek, Ph.D.—Project Manager**
 - **James E. Poppleton—Ecological assessment**
 - **Gary P. Dalbec—Field Studies**
 - **Mark A. Culbreth, P.G.—Project Geologist**
 - **Maya R. Scohier—Ecologist**

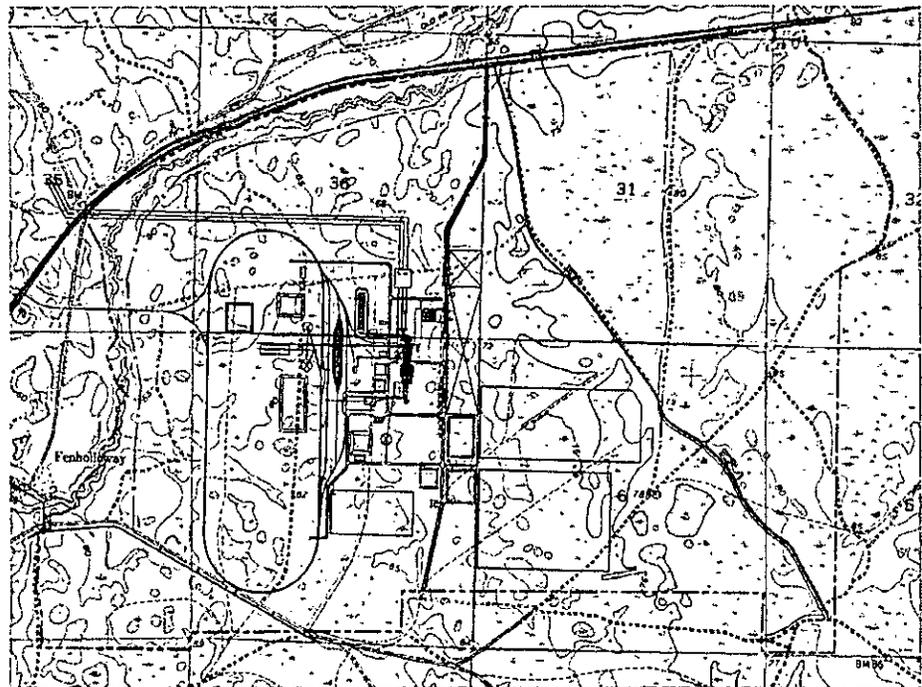


PROJECT NO. 10—TAYLOR ENERGY CENTER SITING AND LICENSING

HIGHLIGHTS:

- Power plant SCA
- Transmission corridor licensing
- NPDES permitting
- Stormwater management
- Air permitting
- Ecological assessments
- Threatened/endangered species
- Water use permitting
- Wetland permitting
- Environmental testing
- Groundwater monitoring
- GIS/CAD
- Wetland delineations

ECT conducted a site selection study covering the entire Florida Peninsula to identify suitable sites for development of a coal-fired power plant for four municipal utilities, the City of Tallahassee, Reedy Creek Improvement District, JEA, and Florida Municipal Power Agency. The siting study resulted in the selection of a 3,200-acre greenfield site near the City of Perry in Taylor County, Florida. ECT conducted full environmental licensing services (site certification application [SCA]) for the proposed 800-MW supercritical, pulverized coal power plant called the Taylor Energy Center.



Conceptual site arrangement for Taylor Energy Center

ECT's services included extensive onsite field studies for wetland delineation, surface and groundwater quality, threatened and endangered species, and noise. Licensing services involved air quality and hydrologic modeling; preparation of the SCA, prevention of significant deterioration, environmental resource permit, NPDES, stormwater, engineering, and other required permit applications; and expert testimony at administrative hearings. ECT also identified potential transmission corridors to distribute power to the north central area of Florida.



After completion of field activities and preparation of the draft SCA submittal, the project was abandoned in 2007 due to a state-imposed moratorium on permitting coal-fired plants.

ADDITIONAL INFORMATION:

LOCATION:	Taylor County, Florida
CLIENT:	Sub to Sargent & Lundy
ADDRESS:	Client Contact: Mike Kurtz 301 W. Bay Street, Suite 2600 Jacksonville, FL 32202 904 • 527-5924
CONTRACT PERIOD:	February 2003—June 2007
CONTRACT AMOUNT:	\$2,587,864

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- Jack D. Doolittle—Project Manager
- Larry J. Danek, Ph.D.—Water Resources
- Brad S. Pekas, P.G., P.E.—Water Resources
- Darren L. Stowe, AICP, CFEA—Socioeconomics
- Susan M. McConnell—Field Services
- Lee S. Norris—Ecology/Water Quality/Field Services
- James E. Poppleton—Ecology/Permitting
- Maya R. Scohier—Ecology
- Maria L. Cruz—GIS/CAD
- John D. Bonds, Ph.D.—FAA Permitting



ENV-B.2. Names and Descriptions of Relevant Projects Presently Under Contract

In Section ENV-B, ECT presented ten projects to show our experience in environmental consulting services. ECT has many additional projects under contract. Representative current projects (not all inclusive) are provided in the following table:

Client	Brief Project Description	Completion Date
Scaff, Inc.	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing
City of Carrabelle	Wharf restoration project	12/2011
Alachua County	Environmental consulting services on a task order basis.	9/2013
City of Newberry	Provide environmental services as City's environmental staff.	Ongoing
FDEP	Petroleum remediation services. ECT has a contract with FDEP as a petroleum cleanup contractor.	9/2012
City of Gainesville	Remediation of brownfield site and design and construction of stormwater park.	12/2011
Hillsborough County Airport Authority	Provide environmental consulting services to assist in acquisition of property and expansion of Tampa International Airport.	9/2015
SWFWMD	Provide technical personnel to supplement District staff in all areas of water resource engineering, modeling, and data management.	9/2013
Mosaic Fertilizer, L.L.C.	Developments of regional impact, permitting, and environmental consulting with respect to expanding phosphate mining areas in central and southwest Florida.	Ongoing
Eckerd College	Asbestos, indoor air quality, and other environmental health consulting services	Ongoing
The Trust for Public Land	Provide Phase I/II ESAs	Ongoing
The Nature Conservancy	Phase I/II ESAs, contamination assessments, and other environmental consulting services.	Ongoing



Client	Brief Project Description	Completion Date
Major theme park (confidential)	Provide regulatory compliance, contamination assessments, remediation, O&M of remediation systems, and other environmental consulting services.	Ongoing
ScaWorld	Provide NPDES permitting and other environmental consulting services.	9/2013
Tampa Electric Company	Provide environmental consulting services on a task order basis.	Ongoing
Volusia County	Provide Phase I/II ESAs, contamination assessments, remediation, risk assessments, and other environmental consulting services on a task order basis.	9/2012
SFWMD	Risk assessments, contamination assessments, QA, and remediation at land acquisition sites in South Florida.	5/2016

ENV-B.3. Firm’s Process and Procedures for Insuring Conformance to Current Design Standards, Codes and Other Regulatory Direction

ECT recognizes its responsibility as a professional consulting firm to always be aware of current rules, regulations and standards, so that we can provide our clients with the highest quality services.

ECT’s Tallahassee office staff are well versed in the Leon County regulatory environment, as well as the federal, state and water management regulations that typically apply to projects that would be likely to be assigned under this RFP.

Additionally, ECT uses processes and procedures that serve to keep our employees current on changes in design standards, codes, and other regulatory direction, including the following:

- ECT's established Corporate Quality Plan (CQP), which defines the policies and procedures for controlling the quality of all facets of ECT's technical work, including field data collection, field survey methods, data analyses, and project deliverables, as well as efforts performed by subcontractors, and project communications.



- Interim technical reviews conducted at project milestones (e.g., 30-, 60- and 90 percent design) by senior technical staff not directly involved in production work for the task to be reviewed.
- During the development of a proposal for a new task assignment under a continuing services agreement, ECT's project staff will routinely review, as needed, applicable federal, state, regional and local design standards, codes and regulatory guidance documents prior to finalizing the proposal and initiating the new project.
- It is ECT's standard practice to establish clear and open communication with all applicable regulatory agencies early in the concept development phase of a new project. To that end, ECT engineers and scientists typically hold at least one pre-application meeting with applicable permitting agencies for a new project that appears to have the potential for a significant degree of permitting complexity. The purpose of the pre-application meeting is to begin a dialogue with the permitting agency, to identify potential obstacles to project execution and completion, and to ensure the path to obtaining needed permit approvals and completing the project is well defined. Such meetings are typically held at project inception, and follow-on meetings prior to permit application submittals are often appropriate for more complex projects, or for evolving project concepts. It is often advantageous to hold at least one such meeting onsite.
- ECT's corporate culture encourages its engineers and other project professionals to maintain active membership, and to pursue leadership roles, in a variety of professional associations and societies (see individual resumes). Our employees are currently well represented in the membership of the Florida Groundwater Association, Florida Stormwater Association, the Florida Section American Water Resources Association, the Florida Lake Management Society, and similar professional organizations.
- ECT also encourages its professionals to author and present papers on current topics at professional meetings.
- ECT strongly encourages its professionals to achieve and maintain industry-standard certifications as appropriate to their area of specialization.
- ECT has established a water resources/natural resources practice line that holds regular firm-wide conference calls, typically on a quarterly schedule. These calls provide a forum for coordination on current technical and regulatory issues on a firm-wide basis, and serves as a starting point for ongoing local, state and region-specific in-house discussions.

In addition to the above listed practices, our professionals keep current with applicable design standards, codes and regulations through other means such as the following:

- Project assignments that involve reviewing ordinances and building codes for the state, various counties, and cities where we also provide design services.
- Membership in various local and state agency technical committees.
- All professionals on the project team, including the project manager and assistant project manager, and the task managers, are subject to continuing education requirements applicable to their field of practice.



- The project manager for this work category, as both a registered geologist and a registered engineer in multiple states, is subject to significant additional continuing education requirements, amounting to a minimum of 15 professional development hours (PDHs) per year. The assistant project manager, due to the credentials she maintains, is also subject to continuing education requirements.
- Because of ECT's many agency clients, we have ongoing access to developing information on regulatory changes.

Finally, ECT provides in-house technical training sessions (e.g., brown-bag seminars) several times a year to promote depth of knowledge and cross-training. Because of the nature of our services, these training sessions necessarily include coverage of pertinent regulatory considerations and “developing stories” in the regulatory realm.

ENV-B.4. Basic and Special Resources Available to the Firm for Performance of Project Duties in this Work Category.

A professional team of environmental consultants such as ECT's must be backed up by the essential facilities and equipment. The most essential equipment and software for this project include:

- **Ecology Survey Equipment**
 - Ponar grab
 - Assorted seine nets
 - Trawl nets
 - Electroshocker
 - SCUBA equipment
 - Assorted 35-mm cameras and lenses
 - Underwater 35-mm camera
 - Underwater video camera
 - Sherman live traps
 - Digital imaging
- **Geology and Geohydrology – Contamination Assessment & Remediation**
 - Organic vapor analyzers
 - Photoionization detectors
 - Assorted bailers
 - Augers
 - Sampling and purging pumps
 - Slug testing system
 - Assorted water quality meters
 - Explosimeters
 - Oil-water interface probe
 - Soil venting system
 - Soil Gas vapor probe
 - Free-product recovery system



• **Industrial Hygiene**

- Explosimeters
- Asbestos sampling equipment
- Stereo microscopes (for asbestos)
- SKC personal sampling pumps
- Precision sound level meters
- Noise dosimeters
- Beta-gamma detectors
- Draeger samplers

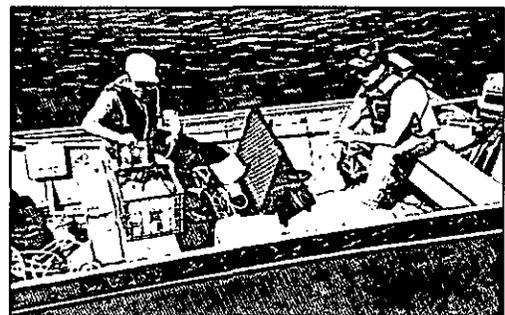
• **Surface Water Equipment (Remote Sensing)**

- ISCO® Avalanche samplers
- ISCO® Model 750 area velocity flow modules
- ISCO® Model 674 rain gauges
- ISCO® Model 4250 flow sensors
- Protective housing enclosures
- Solar panels
- Cables and wiring harnesses, complete set per station
- ISCO® SPA 1489 digital cellular modems
- ISCO® software/lap top computers for data downloading



• **Other Surface Water Equipment**

- YSI® Model 556 pH, temperature, conductivity, and DO meter
- Hydrolab® Surveyor II water quality meter
- pH/conductivity meters (various manufacturers)
- Price-AA velocity meter
- Pygmy velocity meter
- Marsh-McBirney electromagnetic velocity meter
- Checkmate® water quality meters
- Teledyne Gurley® current meters
- Turner Designs® Model 10-005 fluorometer
- Water sampling bottles
- Leupold & Stevens® water level/tide recorders
- Turbidimeter
- Fathometer
- LORAN navigation system
- Global positioning system (GPS)
- Marine radios
- Water level gauges
- Teledyne portable samplers
- Rain gauges





- **Miscellaneous**

- Vehicles (4WD, etc.)
- Survey equipment
- Cameras (digital, various)
- Stereoscopes
- Portable electric generators
- Safety equipment (Level A through D)
- Self-contained breathing apparatus
- Metal detector
- Electronic depth finders

- **Computers and Peripherals**

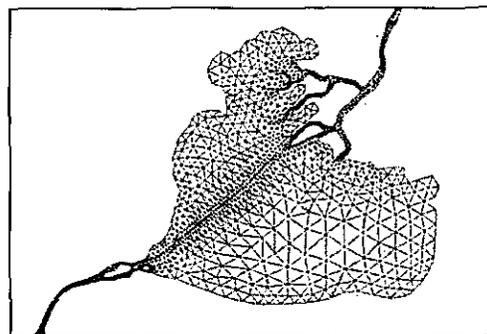
- Windows® Server 2000/2003 network
- Intel® Xeon dual and quad processor based servers (5 TB storage)
- CAD/GIS dedicated workstations
- Intel Core 2 duo, Core i3, quad, and Pentium 4 processor-based PCs
- 3.0 HZ dual core ESRI GIS workstations
- RAID and LTO2 and -3 based backup system
- CD and DVD writing capabilities
- Mobile user remote access capable
- Laser printers—black and white and color
- Scanners—black and white and color
- Full-size color plotting capabilities
- Digital copying capabilities
- Internet access
- Ultra Mobile PC (UMPC) Ruggedized Panasonic Toughbooks (with GPS/ArcPad)
- Trimble GeoXT and Trimble Ranger GPS units
- ESRI ArcMap Arc/Info, ArcEditor, and ArcView
- ESRI 3D Analyst and Spatial Analyst (Raster calculator)
- LP360 - LiDAR Analysis
- GRASS GIS - Specialized Modules for Hydrology
- HSPF/WinHSPF
- HSPEXP (expert system that assists with the calibration of HSPF models)
- GenScn (GENERation and analysis of model simulation Scenarios)
- BASINS3
- MODFLOW-GMS
- MODFLOW-GW Vistas
- GSFLOW
- PEST
- Microsoft® Word for Windows, Version 97 through 2007 (word processing)
- Microsoft® Excel Version 97 (spreadsheet) through Excel 2007
- Microsoft® Power Point 97 (presentation package) through Power Point 2007
- Microsoft® Project 2007
- Microsoft® Access 2007 (relational database)
- Adobe® Acrobat 9



• **Numerical Models**

Surface Water

- AdICPR Interconnecting pond routing model
- CE-QUAL-W2 Two-dimensional laterally averaged hydrodynamic and water quality model
- EFDC Three-dimensional hydrodynamic and water quality
- Visual Hydro SWMM/EXTRAN models with graphical interface
- XP-SWMM SWMM/EXTRAN with GUI
- SWMM-IV Stormwater management
- EXTRAN Dynamic flow routing model
- HEC-1 Surface runoff hydrograph
- HEC-2 Flood routing
- HEC-HMS Surface hydrology
- HEC-RAS Water surface profiles
- WASP Surface water quality
- HSPF Surface runoff and runoff quality
- QUAL2E Riverine water quality
- RECEIV-II Receiving water quality
- CAFE Two-dimensional estuarine or lake circulation
- DISPER Two-dimensional estuarine or lake circulation
- PLUME Near-field mixing zone
- DEM Dynamic estuarine
- CORMIX Mixing zone analysis
- DCORMIX Dredged material disposal
- CORMIX-GT Windows version of CORMIX
- VPLUME Initial mixing zone
- FORFLO Forest floodplain succession model
- RMA2 Two-dimensional circulation and dispersion model
- SMS/BOSS Two-dimensional circulation and dispersion model
- BASINS3 GIS-based watershed and water quality model
- GENESIS Shoreline movement model
- SBEACH Beach erosion model
- RCPWAVE Wave refraction model
- Pond Pack Detention pond design
- TR-20 Stormwater runoff



Groundwater

- GW VISTAS ESI – MODFLOW Package
- MOD INV Parameter optimization
- MODFLOW USGS, 3-D groundwater flow model
- MODFLOW EM Extended memory version
- MODPATH USGS, 3-D particle tracking program



- PRE/POST MOD Pre- and post-data processor for MODFLOW
- MODRET MODFLOW for retention ponds
- ZONEBUDJET Subregion zone, budget package
- MOC USGS, 2-D solute transport and flow model
- PREMOC Pre-data processor for MOC
- MOC NRC USGS MOC Code modified for Nuclear Regulatory Commission
- MT3D 3-D contaminant transport model
- PLASM Prickett & Lonquist, 2-D, aquifer simulation model
- AQTESOLV Geraghty & Miller aquifer test solving program
- SUTRA USGS, 2-D saturated/unsaturated transport and flow model
- WHPA IGWMC wellhead protection area program
- BIO PLUME II RIFA, simulation of transport and biodegradation of dissolved hydrocarbons
- ROKEY SYSTEM 3-D, analytical contaminant transport model
- LUCKY 7/NO DCA Y Parameter estimation models

ENV-C. WILLINGNESS TO MEET SCHEDULE AND BUDGET REQUIREMENTS

In the consulting industry, repeat business from satisfied customers allows companies to grow and prosper. To obtain repeat business, environmental consultants must provide clients with a quality product that not only meets expectations, but is also delivered on schedule and at or below the budgeted cost. ECT has grown over the years as a result of providing quality products on schedule and budget. **ECT makes a commitment to Leon County for this proposal that we will meet all schedules and budget requirements.** ECT has had several projects with the County over the past 5 years where we were successful in meeting schedule and budget requirements.

ENV-D. EFFECT OF THE FIRM’S RECENT, CURRENT AND PROJECTED WORKLOAD

ENV-D.1. Names and Descriptions of Projects for Which Firm is Presently Under Contract and the Anticipated Completion Dates of Those Projects.

ECT has between 1,000 and 1,100 projects active at any given time. These projects are valued from a few hundred dollars to over \$20 million in size. Because ECT has so many projects active, we are providing a representative listing of some of our larger projects in Florida, and also some managed out of the Tallahassee office. Known or estimated completion dates are provided for these projects. The “ongoing” project designation is used where ECT has a contract to provide services on a task basis without an end date for the overall contract.



*Environmental Support Services
Leon County Request for Proposals No. BC-03-17-11-25*

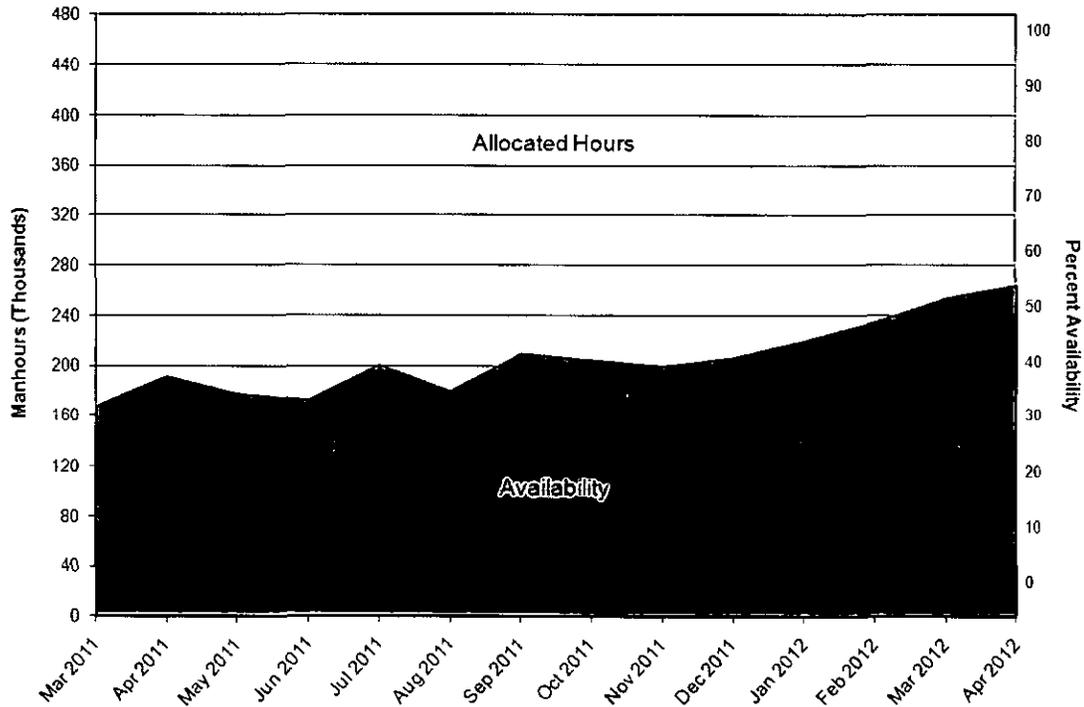
Client	Management Office	Brief Project Description	Completion Date
The Pantry	Gainesville	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing
Scaff, Inc.	Tallahassee	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing
NFWFMD	Tallahassee	Permit reviews and approvals for ERP applications.	9/2011
City of Tallahassee	Tallahassee	Brownfield site remediation	9/2011
City of Carrabelle	Tallahassee	Wharf restoration project	12/2011
City of Gainesville	Gainesville	Remediation of brownfield site and design and construction of stormwater park.	12/2011
SWFWMD	Tampa	Provide technical personnel to supplement District staff in all areas of water resource engineering, modeling, and data management.	9/2013
Hillsborough County Airport Authority	Tampa	Provide environmental consulting services to assist in acquisition of property and expansion of Tampa International Airport.	9/2015
FDEP	Gainesville	Petroleum remediation services.	9/2012
Eckerd College	Tampa	Asbestos, indoor air quality, and other environmental health consulting services	Ongoing
The Trust for Public Land	Tampa	Provide Phase I/II ESAs	Ongoing
City of Newberry	Gainesville	Provide environmental services as City's environmental staff.	Ongoing
SFWMD	Fort Lauderdale	Risk assessments, contamination assessments, QA, and remediation at land acquisition sites in South Florida.	5/2016



Client	Management Office	Brief Project Description	Completion Date
Mosaic Fertilizer, L.L.C.	Tampa	Developments of regional impact, permitting, and environmental consulting with respect to expanding phosphate mining areas in central and southwest Florida.	Ongoing
Alachua County	Gainesville	Environmental consulting services on a task order basis.	9/2013
The Nature Conservancy	Orlando	Phase I/II ESAs, contamination assessments, and other environmental consulting services.	Ongoing
Major theme park (confidential)	Orlando	Provide regulatory compliance, contamination assessments, remediation, O&M of remediation systems, and other environmental consulting services.	Ongoing
SeaWorld	Orlando	Provide NPDES permitting and other environmental consulting services.	9/2013
Tampa Electric Company	Tampa	Provide environmental consulting services on a task order basis.	Ongoing
Volusia County	New Smyrna Beach	Provide Phase I/II ESAs, contamination assessments, remediation, risk assessments, and other environmental consulting services on a task order basis.	9/2012

ENV-D.2. Firm’s Ability to Absorb Any Projects Resulting from this Contract

ECT’s project team has more than adequate staff availability to complete any projects assigned by Leon County in a timely and efficient manner, as shown in Section ENV-A1. The following table has been provided to indicate the percentage availability for both the ECT staff and the key subcontractor proposed for this project during 2011. The graph provided depicts the projected ECT company backlog (allocated hours) and projected percent availability for 2011. ECT has a staff of 232, with over 170 personnel located in eight Florida offices. From the Florida staff, we have sufficient depth of qualified and experienced personnel to provide any level of additional technical support beyond the primary project team (shown on organizational chart) that the project may need, and make a commitment to meet all scheduling requirements.



ENV-E. EFFECT OF PROJECT TEAM LOCATION

As described earlier in this proposal, the project will be managed from ECT’s local office in Tallahassee. It is anticipated that most of the work will be completed by our local office and subcontractors located in Leon County. ECT’s local personnel can be at the County’s project management office in less than 15 minutes, and have shown the ability to provide this response time on previous County projects.

In the event additional personnel are needed, ECT will primarily utilize our offices in Florida. In the event a unique task is assigned that is more applicable to personnel in other offices, we will provide those personnel as required. Our intent is to minimize travel cost (and thereby reduce costs to the County) by using the Internet, video conferencing, and telephone if we need to interface with personnel in other offices. We routinely interface between offices on many company projects that are ongoing.

ENV-F. APPROACH TO THE PROJECT

ECT’s proposed approach to accepting and completing specific projects assigned under this contract may vary considerably depending upon the nature of the assignment, but as an example a generic project approach, which could be applied to a variety of common stormwater infrastructure design-bid-build projects, is summarized as follows:



Contract Kick-Off

Upon award of the contract, ECT's project management team will schedule a kickoff meeting with Leon County contract and/or project management personnel to discuss the contract and review the general scope, scheduling needs, budgetary constraints, relative priorities and client expectations relative to ECT's performance under the contract.

Task Negotiation

For specific tasks in which the County desires ECT's services, it is anticipated that task negotiations will generally proceed as follows:

Project Definition

ECT will conduct a needs assessment to clearly define the project to be addressed. Although the details of a needs assessment are highly task-specific, this commonly begins with an informal conversation, aided by review of background graphics, correspondence, and other relevant information, leading to a project definition that is mutually satisfactory to the County and ECT. An initial site visit and an initial review of background site information, such as County records or public databases, may be appropriate at this stage.

Project Approach

For projects of significant complexity, ECT will develop a proposed project approach for the County's review and concurrence. Conceptual pre-application discussions with permitting agency personnel may be appropriate at this stage, and further discussion between ECT and the County may be required, leading to identification of specific County expectations for satisfactory completion of the project, and agreement between the County's project manager and ECT on a task-specific project approach. For relatively straightforward projects, County review in this step may not be needed and in such cases, ECT will progress to Proposal Development.

Proposal Development

ECT will develop a proposal defining a scope of services, budget and schedule that is proposed by ECT to implement the selected project approach. The proposal will also identify any applicable project deliverables and associated timeframes, meeting schedules and travel requirements as applicable. Following County review, any necessary adjustments to the proposal will be negotiated between the County and ECT, leading to issuance of a project-specific Task Authorization to ECT by the County.

Task Performance

Following ECT's receipt of a project-specific task authorization from the County, ECT will proceed with completion of the authorized scope of services, generally as follows:



Project Kick-Off

ECT will schedule and conduct internal and client kick-off meetings appropriate to the task authorization. Internal kick-off meeting participants will typically consist of the ECT project team professional staff and in some cases subcontractor personnel. Client kick-off meeting participants will typically consist of County staff, ECT's project manager and possibly key ECT project personnel, and in some cases subcontractor personnel and/or third-party stakeholders.

Project Performance

ECT will complete the project assigned under the terms of the approved task authorization, including conduct of applicable agency pre-application meetings and/or public meetings, performance of the scope of services, and preparation of deliverables. Tasks to be included in the scope of services will commonly include some or all of the following:

- Detailed desktop analysis of site-specific information obtained from such sources such as TLEGIS, the NRCS Web Soil Survey, the U.S. Fish & Wildlife Service National Wetland Inventory online mapping tool, FDEP's LABINS website, the Leon County Property Appraiser's website and other public databases.
- Onsite evaluation of existing conditions by ECT engineers and scientists, and applicable subcontractors, such as, for example, surveyors and geotechnical specialty consultants.
- Evaluate site constraints (e.g., land use/zoning issues, property ownership issues, possible presence of wetlands, listed species/habitat issues, severe slopes, etc.) and/or hindrances to project completion.
- Develop and evaluate conceptual alternative design solutions and prepare a preliminary engineering design. Initial modeling of hydraulics and hydrology, and/or feasibility studies, may be appropriate for some projects at this stage.
- Hold pre-application agency meetings to review the selected preliminary design.
- Hold public outreach events (e.g., neighborhood open house) and third-party stakeholder meetings if appropriate.
- Adjust preliminary design and revisit agency pre-application meetings if appropriate.
- Obtain planning level project approvals.
- Prepare final engineering design, specifications, and permitting documents. Hold additional pre-application meetings to review project concept changes implemented during the final design process, if appropriate.
- Provide bidding and bid review assistance as desired by the Department.
- Attend the onsite pre-construction conference with the County's project manager, construction contractor, applicable subcontractors and other parties (e.g., construction material suppliers) as appropriate,



to formally introduce all parties, to accomplish project administrative coordination, to reinforce project communication, notification, submittal and 3rd party testing protocols as spelled out in the contract documents, to review permit compliance issues, etc.

- Provide construction administration services during project build-out and review any 3rd-party testing results.
- Complete record (sometimes called “as-built”) drawing certifications and close out construction phase permits.

APPENDIX A

**COMPANY AND INDIVIDUAL
LICENSES AND REGISTRATIONS**

Licensee Details

Licensee Information

Name: **Environmental Consulting & Technology, Inc. (Primary Name)**
(DBA Name)

Main Address: **3701 NW 98th Street**
GAINESVILLE Florida 32606

County: **ALACHUA**

License Mailing:

LicenseLocation:

License Information

License Type: **Certificate of Authorization**

Rank: **Cert of Auth**

License Number: **5520**

Status: **Current,Active**

Licensure Date: **11/29/1989**

Expires: **02/28/2013**

Special Qualifications Qualification Effective

[View Related License Information](#)

[View License Complaint](#)

Contact Us :: [1940 North Monroe Street, Tallahassee FL 32399](#) :: Call.Center@dbpr.state.fl.us :: Customer Contact Center
850.487.1395

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Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions regarding DBPR's ADA web accessibility, please contact our Web Master at webmaster@dbpr.state.fl.us.

**ECT HAS NOT YET RECEIVED PERMANENT
RENEWAL LICENSE. SEVERAL OF THE STAFF RENEWAL
LICENSES HAVE BEEN APPLIED FOR,
BUT NOT YET RECEIVED.**

AC# 4995777

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

SEQ# L10061501486

DATE	BATCH NUMBER	LICENSE NBR
06/15/2010	090484128	GB42

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

ENVIRONMENTAL CONSUL & TECH, INC
3701 NW 98TH ST
GAINESVILLE FL 32606

CHARLIE CRIST
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHARLIE LIEM
INTERIM SECRETARY

AC# 4718182

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

SEQ# L09111201109

DATE	BATCH NUMBER	LICENSE NBR
11/12/2009	098088380	ZA0000131

The ASBESTOS BUSINESS ORGANIZATION
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2011

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.
MICHAEL C. DUVALL
3701 NW 98TH STREET
GAINESVILLE FL 32606-5004

State of Florida

Department of State

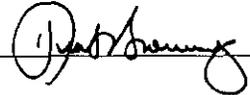
I certify from the records of this office that ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC. is a corporation organized under the laws of Delaware, authorized to transact business in the State of Florida, qualified on February 1, 1989.

The document number of this corporation is P22824.

I further certify that said corporation has paid all fees due this office through December 31, 2011, that its most recent annual report was filed on February 18, 2011, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

*Given under my hand and the Great Seal of
Florida, at Tallahassee, the Capital, this the
Nineteenth day of February, 2011*



Secretary of State



Authentication ID: 00019S025170-021911-P22824

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.

<https://efile.sunbiz.org/certauthver.html>

State of Florida
Board of Professional Engineers
Ronald H. Parks, P.E.

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 28-FEB-11
Audit No: 228201120317
P. E. Lic. No: 38496
DISPLAY AS REQUIRED BY LAW

State of Florida
Board of Professional Engineers
Leland Andrew Smith, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
EXPIRATION: 2/28/2013
AUDIT No: 228201319482
P. E. Lic. No: 50794

State of Florida
Board of Professional Engineers
James Nicholas Spangenberg, P.E.

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 28-FEB-11
Audit No: 228201126140
P. E. Lic. No: 62106
DISPLAY AS REQUIRED BY LAW

State of Florida
Board of Professional Engineers
Bradley S. Pekas, P.E.

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 28 FEB-11
Audit No: 228201120612
P. E. Lic. No: 48867
DISPLAY AS REQUIRED BY LAW

AC# 4935657
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL ENGINEERS
SEQ# 11040401101

DATE	ISSUANCE	LICENSE NO.
05/09/2010	098171403	091102

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

POTTU, RONALD R
2551 ROBEY DR
TALLAHASSEE FL 32308

CHARLES CRIST GOVERNOR
CHARLES LIEM INTERIM SECRETARY
DISPLAY AS REQUIRED BY LAW

AC# 5015487
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL ENGINEERS
SEQ# 11060380900

DATE	ISSUANCE	LICENSE NO.
05/28/2010	098182799	091407

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

PEKAS, BRADLEY S
3335 WOODBAY DRIVE
TAMPA FL 33626

CHARLES CRIST GOVERNOR
CHARLES LIEM INTERIM SECRETARY
DISPLAY AS REQUIRED BY LAW

AC# 5037704
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL ENGINEERS
SEQ# 110671401101

DATE	ISSUANCE	LICENSE NO.
07/14/2010	100000474	090417

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

SHAFER, KEVIN A
3515 W. SHAFER
TALLAHASSEE FL 32304

CHARLES CRIST GOVERNOR
CHARLES LIEM INTERIM SECRETARY
DISPLAY AS REQUIRED BY LAW

AC# 4989007
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL ENGINEERS
SEQ# 110001001101

DATE	ISSUANCE	LICENSE NO.
05/18/2010	098042230	091596

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

NICHOLS, JAMES
1711 W. WENDLAND DRIVE
TALLAHASSEE FL 32301

CHARLES CRIST GOVERNOR
CHARLES LIEM INTERIM SECRETARY
DISPLAY AS REQUIRED BY LAW

AC# 5433643
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL ENGINEERS
SEQ# 110001001101

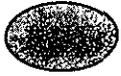
DATE	ISSUANCE	LICENSE NO.
02/02/2011	100000011	09000011

The PROFESSIONAL GEOLOGIST
Named below IS LICENSED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

NICHOLS, MICHAEL
1000 W. WENDLAND DRIVE
TALLAHASSEE FL 32301

CHARLES CRIST GOVERNOR
CHARLES LIEM INTERIM SECRETARY
DISPLAY AS REQUIRED BY LAW

APPENDIX B
RESUMES OF PROJECT SUPPORT PERSONNEL



DARREN L. STOWE, AICP, LEP
Principal Scientist

Project Assignment: Environmental Assessments

Education

B.S., Biology—Cornell University, 1975
Graduate Study, Urban and Regional Planning—Florida State University, 1990

Years with ECT—15
Other Firms—16

Registrations

American Institute of Certified Planners
Certified Florida Environmental Assessor
INSTEP Licensed Environmental Professional, No. 348

Affiliations

Florida Environmental Assessors Association (past president)
SunCoast Chapter of American Planning Association

Areas of Specialization

Phase I/II Environmental Site Assessments and Other Due Diligence Investigations, Peer Review, Planning and Socioeconomic Aspects of Site Certification Applications and Certificate of Public Convenience and Necessity Applications, Comprehensive Plan Amendments, Expert Witness for Land Use and Socioeconomics

Project Planner; Phase I ESA, Sargent & Lundy—Due diligence investigations of an approximately 3,200-acre property in Taylor County, Florida, proposed for development by the Florida Municipal Power Authority as a solid fuel power plant. Prepared a comprehensive plan text amendment and amendment to the Future Land Use Map. Provided oversight of subcontractors for roadway/railroad alternatives and archaeological/historical resource surveys. Prepared land use and socioeconomic portions of SCA.

Project Planner, Smith Unit 3 SCA, Gulf Power—Completed the land use and socioeconomic background study and impact analysis sections of the application for siting a 550-MW natural gas fired electrical generating plant in Bay County, Florida. Prepared documentation to support an amendment to the Future Land Use map of Bay County from an Agricultural to an Industrial designation.

Project Manager; Phase I/II ESAs, The Trust for Public Land—Performed Phase I ESAs of many large-acre, undeveloped tracts for public acquisition for The Trust for Public Land throughout Florida. Conducted a Phase I ESA of a 3,800-acre tract in Pasco County. Subsurface investigations were conducted on two onsite landfill areas. Performed Phase I/II ESAs for proposed rails-to-trails projects in Leesburg, Sarasota County, and St. Petersburg, Florida.

Project Manager and Senior Scientist; Phase I, II, and III ESAs and Remedial Actions, The Trust for Public Land—Performed a Phase II ESA of an approximately 900-acre property adjacent to Kissimmee State Park in Polk County, Florida. Confirmed pesticide contamination at a cattle pen area. Assessed extent of contamination and excavated contaminated soil. Recent rails to trails assessments in Leesburg, Florida and Sarasota County, Florida.

Project Manager and Senior Scientist; Phase I, II, and III ESAs and UST Management Services, The Trust for Public Land—Performed Phase I and Phase II ESAs for the Marineland facility to facilitate sale to three separate entities including Flagler County, the University of Florida, and a private developer. Removed USTs and contaminated soils at two separate locations.

Project Manager; Phase I/II ESAs and Remedial Actions, SWFWMD—Completed numerous Phase I ESAs throughout the District. Assessed potential contamination associated with cattle pens, cattle dipping vats, and other agricultural activities. Conducted many peer reviews of due diligence documents preparing detailed review letters.

Project Manager; Transaction Screen Processes, Phase I and II ESAs, Numerous Banks and Lenders in the Tampa Bay Area—Performed Phase I/II ESAs on properties ranging from day care centers to automobile repair facilities in the Tampa Bay area of Florida. Performed reviews of phase I ESA reports and prepared detailed review letters.

Project Manager; Phase I/II ESAs, Verizon Wireless—Managed over 30 Phase I ESAs and four Phase II ESAs throughout Florida of prospective lease spaces. Phase II ESAs assessed both onsite and offsite sources of potential impact and potential for vapor intrusion. Older developed spaces required limited asbestos surveys. Coordinated Phase I ESA efforts with other Florida ECT offices while maintaining consistency of the Phase I ESA reports.



Project Manager; Phase I ESA, FPL—Conducted onsite investigations of two natural gas-fired electrical power plants located in Paris and Forney, Texas. Conducted extensive interviews with knowledgeable personnel to assess the status of wastewater discharges, chemical use, and chemical storage.

Project Manager; Phase I/II ESA, Soil Removal, and Natural Attenuation Monitoring; Mabry Carlton Ranch—Responsible for managing Phase I ESA of 12,000-acre, active ranch property and Phase II ESA of recognized environmental conditions associated with two cattle dipping vats and an active cattle pen area. Calculated area of soil removal through an iterative sampling and analysis program. Managed the oversight of the soil removal activities and prepared and implemented a post-monitoring groundwater sampling program. Documents prepared for SWFWMD and Sarasota County.

Project Manager; Comprehensive Plan, City of Ocala—Responsible for reviewing City of Ocala's land use designations and zoning to update the comprehensive plan. The primary focus of the update was to review and incorporate policies related to protecting groundwater from contamination by hazardous wastes, identifying and protecting wetland areas, identifying and protecting threatened and endangered species and habitats, and the identification and delineation of karst-sensitive areas. The findings of the project were presented at a public hearing.

Project Manager; DRI Services, Shimberg-Cross—Performed DRI services for the Fishhawk Ranch Development in Hillsborough County, Florida. Regulatory approvals were granted for the 5,000-acre primarily residential development, including gopher tortoise relocation plans and conservation easements.

Project Planner; Polk Power Station Unit 6, Tampa Electric Company (Tampa Electric)—Prepared supporting documentation for a level 4 conditional use permit and the appropriate land use and socioeconomic sections of the SCA in support of a proposed 660-MW integrated coal gasification combined cycle (IGCC) electrical power generating plant in Polk County, Florida. The application also included new transmission lines requiring land use review.

Project Planner; Transmission Line Siting Act-Willow Oak to Davis, Tampa Electric—Project planner and land use expert witness for a 30-mile, 230-kV transmission line through three different municipalities. Assisted in route selection and public outreach. Testified as a land use expert before the Florida Administrative Law Judge.

Project Planner; ESA, Southern Company Services—Project planner and land use expert for a proposed integrated gas combined cycle electrical power plant; a surface lignite coal mine; and linear facilities including a natural gas pipeline, transmission lines, and a pipeline for sequestered carbon dioxide in Kemper County, Mississippi. Responsible for preparation of the land use, socioeconomic, environmental justice, housing, and transportation sections of the Department of Energy's environmental impact statement.



MICHAEL C. DUVALL, P.G., LAC
Principal Scientist

Project Assignment: Hazardous Materials and Brownfields

Education

B.S., Geology—Plymouth University (England), 1980

Years with ECT—21

Other Firms—11

Registrations

Professional Geologist, Florida,
No. 1596

Professional Geologist, Arkansas,
No. 1190

Professional Geologist, Tennessee,
No. TN2239

Licensed Asbestos Consultant,
No. AX0000038

Registered Environmental Professional

AHERA-Certified Inspector

AHERA-Certified Management Planner

AHERA-Certified Asbestos Abatement Project Supervisor

AHERA-Certified Lead Abatement Project Supervisor

NIOSH 582-Certified for the Analysis of Asbestos Dust

Affiliations

National Water Well Association

American Industrial Hygiene Association

Society of Petroleum Engineers

Areas of Specialization

Project Management.

Environmental Site Assessments.

Facility Surveys, Indoor Air

Quality Evaluations, Industrial

Hygiene Services, Geological

Assessment, Subsurface Logging

Project Scientist; Lead-Based Paint and Asbestos Surveys, Environmental and Geotechnical Specialists, Inc.—Responsible for consulting and surveying services for asbestos and lead-based paint at a bridge on State Road 263 in Leon County, Florida.

Project Manager; Asbestos Survey at East Ridge Retirement Village (ERRV), AVMED—Responsible for completing an asbestos survey of buildings located on ERV in Miami-Dade County prior to demolition and renovation.

Licensed Asbestos Consultant; NESHAPs Asbestos Surveys, Eckerd College—Responsible for supporting asbestos surveys prior to large- and small-scale renovation projects on the campus in St. Petersburg, Florida, including preparation of asbestos abatement plans.

Project Manager; Asbestos Surveys, Hodgen Construction—Coordinated the NESHAPs asbestos survey to determine the number of bulk samples required to comply with OSHA regulations during demolition activities in the Modernage furniture warehouse in Miami-Dade County, Florida.

Project Manager; Asbestos Abatement, FDEP Preapproval Program—Responsible for NESHAP survey, development of asbestos abatement plans for the Woerner Classic Turf Farm 2 maintenance area building, and demolition monitoring in Palm Beach County, Florida.

Project Manager; RCRA 10-Transfer Station Permit Application, Chemical Distribution Company—Performed site evaluation and data acquisition to obtain 10 transfer station permit in Broward County, Florida. Client had previously made numerous attempts to acquire permit. Conducted fatal flaw analysis and determined an administratively poor application had been prepared for local city jurisdiction. Obtained concurrence from city, to enable application to be prepared for county and state.

Project Manager; OSHA Health and Safety Inspections/Environmental Inspections, Flagler Real Estate Services—Performed health and safety inspections and environmental inspections on 18 separate, multi-tenant properties throughout Miami-Dade, Broward, and Palm Beach Counties. These tasks included evaluating current health and safety measures in place, possible human health exposure hazards which require correction and environmental concerns on the individual properties that require immediate attention, additional investigation, and/or regulatory compliance in accordance with local and state agencies.

Task Manager/Geologist; RAP, RaceTrac—Site Assessment/RAP, RaceTrac Petroleum—Assisted with associated numerous facilities in a RAP evaluating the use of remedial technologies including biosparging/air sparging for a facility in Broward County, Florida.

Project Manager/Geologist; Site Assessments, Maroone, RaceTrac—Completed site assessments of retail gasoline stations in Broward County, Florida. The extent of petroleum contamination was determined through soil borings, groundwater monitoring, and sampling program. Additional activities included regulatory liaison, potable well survey, and evaluation of hydraulic gradient, site mapping, and secondary contamination source inventory.

ECT

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Achieved regulatory approval to proceed with No Further Action (NFA) or RAP as required.

Project Manager/Geologist; Hendrick Automotive Group—Project manager for closure of 12 inground hydraulic lifts in Pompano Beach, Florida, as a precursor to site development. Closure required initial remedial action activities (169 tons of impacted materials), and inoculation with bioremedial treatment compound (Petrox) to assist in cleanup of residual impacts with subsequent groundwater and soil quality assessment to facilitate preparation of tank closure assessment report for county review.

Project Manager/Geologist; Macmillan Oil Company—Completed historical evaluation, data mining review of more than 10 years of data graphics illustration for Hialeah, Miami-Dade County, to refute Department of Environmental Resources Management (DERM) contention requiring additional source removal activities associated from multiple petroleum sources at a rail yard. This contentious site required presentation of data to achieve no further action status at considerable cost savings to the client.

Task Manager; Land Acquisition Projects, SFWMD—Performed site evaluation, data acquisition and geological assessment tasks for former US Sugar Plant at Bryant Mill and Clewiston slated for purchase as portion of the large 187,000-acre land acquisition. Project tasks completed under abbreviated time scale pursuant to contract with State and US Sugar.

Project Manager; Comprehensive Risk Assessment, Flagler Development Ltd.—Prepared site evaluation report, Phase I and Phase II tasks for 400-acre FEC railyard property located in Miami, to provide a comprehensive assessment of environmental fiduciary liabilities associated with acquisition. Based upon the assessment, risk was determined to be between \$7.5 and \$10 million.

Project Manager/Professional Geologist; FDEP Preapproval Program—Completed site assessments, tank closure assessments, and natural attenuation monitoring of surficial and Floridan aquifer contamination to achieve site closure for numerous facilities in South Florida.

Task Manager; Land Acquisition Projects, SFWMD—Performed site coordination and geological oversight for large agricultural tracts slated for use as Regional Alternative Reservoirs. Involved with all phases of projects since approval under existing contract with SFWMD.

Project Manager/Professional Geologist; Site Assessments, Numerous Clients Throughout Florida—Completed site assessments in accordance with Chapter 62-770, FAC. The extent of petroleum contamination was determined through soil borings, groundwater monitoring, and sampling program. Additional activities included regulatory liaison, potable well survey, evaluation of hydraulic gradient, site mapping, and secondary contamination source inventory.

Assistant Project Manager; SCA, Panda Energy International, Inc.—Prepared SCA for permitting a 1,000-MW large natural gas, combined cycle power plant in Fort Pierce. Data acquisition and coordination of all engineering, scientific, regulatory, and municipality tasks for completion of SCA permit.

SATISH N. KASTURY
Associate Vice President
Director, Regulatory Affairs

Project Assignment: Hazardous Materials and Brownfields

Education

M.S., Environmental Engineering—University of Connecticut, 1978

B.S., Civil Engineering—University of Calicut, India, 1974

Years with ECT—3

Other Firms—30

Affiliations

Advisor, USDOT/FTA/Mumbai Metropolitan Regional Development Authority (MMRDA)
Member, Air & Waste Management Association
Associate Member, Florida Bar
Member, International Committee, Transportation Research Board
Technical Advisor, Center for Clean Technologies, Bangalore, India
Member, Florida Bio-Fuel Association
Florida Brownfields Association

Areas of Specialization

Renewable Energy; Waste-to-Energy; Environmental Sustainability; Governmental and Regulatory Affairs; Development of Corporate Environmental, Health, and Safety Compliance Programs; Environmental Site Management Training; Comprehensive Multi-disciplinary Operational Compliance Audits; RCRA Corrective Action and Closure; Hazardous Waste Facility Permitting and Compliance; Solid Waste Management; Contamination Assessment and Remediation; Project Management; Regulatory Negotiations; Waste Minimization Recycling; ISO 14000

Project Director; EPA 2008 Brownfield Grant Program, City of Tallahassee—Provide programmatic support to the city on the EPA 2008 Brownfield grant program, including technical and regulatory assistance.

Project Director, Brownfield Redevelopment, City of Tallahassee—The city of Tallahassee designated the Gaines Street corridor as a Brownfield redevelopment project. Activities included providing technical and regulatory assistance in the Brownfield redevelopment; coordinating the activities with the city's Economic Development, Real Estate Group, FDEP, EPA; and RCRA/CERCLA/Brownfield Program interaction to expedite the city's redevelopment initiatives.

Regulatory Director, Cascade Park, City of Tallahassee—Responsible for the development of regulatory solutions to the environmental remediation of the City's old manufactured gas plant contaminated waste site as part of EPA CERCLA Order and also as part of the City's Brownfield Redevelopment. Duties included the regulatory and technical interaction and public participation/public meetings with EPA, FDEP, USACE, city and county governments, neighborhood associations and concerned citizens, the Florida Governor's Office, and the elected officials.

Project Director; Incinerator Ash Building, City of Tallahassee—Providing technical and regulatory assistance. Responsible in the development of RCRA RAP including the complete waste characterization of the incinerator ash and the surrounding interior and exterior walls, and development of the demolition/remediation of the incinerator ash building area.

Advisor; Mumbai Metro Regional Development Authority (MMRDA)—Assisted with development of six regional solid waste management facilities with a capacity of 1,000 tons per day, and the comprehensive solid waste management systems for MMRDA.

Project Director, New Delhi Airport, India—Responsible for the development of a comprehensive solid waste management program for the entire airport, with an annual load of about 35 million passengers. The project included design of a systems approach to the waste management including source segregation and automatic collection systems of paper, plastic, metal and organic waste; solid waste landfilling; waste-to-energy systems for the organic wastes; and a treatment system for the airport's biohazardous wastes.

Project Director; Utility (Purdum) Plant, St. Marks Refinery; City of Tallahassee—The site is at the downstream of Old Petroleum-St. Marks Refinery in Tallahassee, Florida. This project involved environmental remediation of the dioxin and other petroleum contaminated soils. Activities included coordination of the regulatory and technical activities with EPA, FDEP, and the City of Tallahassee; and development of regulatory solutions for effective remediation of the dioxin-contaminated soils.

Project Director, Hazardous Waste Curriculum for Airport Aviation Maintenance, FDEP—Responsible for design and development of a comprehensive hazardous waste curriculum for aviation maintenance facilities, airport tenant businesses, and airports authorities. This curriculum was devel-

oped with the technical assistance and input from the Federal Aviation Authority (security), U.S. Navy, Embry-Riddle Aeronautical University, and others.

Regulatory Director: ESA, Babcock Ranch—The Babcock Ranch is a 90,000-acre area in Naples, Florida, and was the biggest real estate acquisition between the FDEP and private property owners. Responsibilities included providing regulatory and technical assistance with respect to the real estate transfer; completing a due diligence assessment; design and implementation of the environmental remediation of various areas of concern, including an old shooting range site; and wetland jurisdictional evaluations.

Project Director, Greenhouse Gas (GHG) Project, City of Tallahassee—Responsible for providing technical and regulatory assistance in the development of GHG and carbon dioxide offset studies.

Project Director, Environmental Policy and Energy Resources City of Tallahassee—Responsible for providing technical and regulatory assistance in the development of sustainable environmental and energy strategies, Green Programs, recycling, carbon reduction strategies, energy conservation, renewable energy, and ISO 14000 environmental management systems.

Project Director, Carnival Cruise Lines—Provided regulatory and technical assistance on sustainability, toxics release inventory reporting, G3 guidelines, Global Reporting Initiative, and energy efficiency. Unique hazardous waste management issues in cruise line industry include role of recycling, waste minimization and pollution prevention in transportation, importance of ISO 1400 and ISO 18001 programs in transportation, and cutting "CARBS" in transportation.

Project Director/Manager, Progress Energy Inc.—Developed a special regulatory exemption from RCRA hazardous waste regulations, for the substantial quantities of more than about 500,000 gallons of boiler and chemical cleaning wastewaters containing chromium concentrations above the regulatory TCLP concentrations, to be managed as nonhazardous wastewaters. FDEP approval of the regulatory exemption has provided the client with a substantial cost savings.

Project Director, Watson Pharmaceuticals—Provided regulatory and technical assistance pertaining to the company's environmental health, safety, and security (EHS&S) program, Title V reporting under the Clean Air Act, and other environmental issues pertaining to the facility in Fort Lauderdale, Florida.

CECILIA McKIERNAN, CFM, LEED AP
Senior Scientist I
**Project Assignment: Hazardous Materials and Brownfields/
Public Outreach**

Education

M.S., Environmental Health—
University of South Florida,
1998
B.S., Marine Science/Biology—
University of Tampa, 1985

Years with ECT—2
Other Firms—23

Registrations

Leadership in Energy and Environmental Design Accredited Professional (LEED AP)
Certified Floodplain Manager

Areas of Specialization

Outreach, Watershed Management, FEMA Programs, TMDLs Water Quality, Drinking Water, Lake Restoration, Water Supply, Stormwater, and Stream Restoration

Project Scientist; Staffing Support Contract, SWFWMD—Coordinating activities for SWFWMD related to the Federal Emergency Management Agency (FEMA) Map Modernization efforts, Risk MAP (Mapping, Assessment and Planning) and the District's watershed management program. Working with federal, state, and local government officials to align efforts, eliminate duplication and capitalize on the assets of each entity. Assisting program engineers with communication of critical information to the public. Facilitating large open house events, recruiting volunteers, troubleshooting problems, and assisting residents with issues. Updating the SWFWMD business plan incorporating work with FEMA as well as cooperative funding with local government partners.

Environmental Administrator; Watershed and Resource Management, FDEP—Supervised 50 diverse and complex staff, provided team leadership, hired and trained staff, and planned use of resources which led to improved water quality and protection of wetlands. Communicated with federal, state, and local agencies; state legislators; non-profit organizations; and the public which resulted in better coordination and critical information flow. Served as FDEP water representative for the Tampa District at regional meetings and routinely served as the chair or presented FDEP perspective on an issue. Named FDEP trustee of \$2.5 million fund for restoration efforts on the Alafia River, as well as several other restoration efforts totaling over \$5 million.

Project Manager; Various Clients—Provided direction for technical staff in jobs ranging from restoration efforts to major development and linear/pipeline projects. A majority of time was spent working on a major natural gas pipeline project. Directed planning efforts and tracked staff resources for maximum efficiency.

Environmental Administrator; Watershed Management, FDEP—Developed and directed local section of federally-mandated water quality assessment initiative that established total maximum daily loads (TMDLs) of pollutants for area water bodies. Acted as the liaison in administering the TMDL program and worked closely with Tallahassee in implementation of the local program. Enabled the FDEP to evaluate 50 percent more water bodies for impairment through section coordination and planning. Established internal communication plan to ensure timely review of data and documents, resulting in content improvement.

Senior Management Analyst II; Ombudsman, FDEP—Gathered and guided complex multi-faceted groups in significant problem-solving efforts that included control of medflies with pesticides and the use of phosphogypsum as road bed material and capitalized on the diversity of the teams. Advocated for the public or industry in disputes with FDEP. Identified problematic operational procedures and presented them to senior management including suggested corrective actions. Many solutions oftentimes led to streamlined process and reduced staff time needed to complete the task. Prepared documents for legislative budget requests and the Department's Sterling Challenge Total Quality Management entry.

Environmental Specialist III; Drinking Water Program, FDEP—Planned and implemented initiative to increase productivity. Motivated staff by posting

their successes in a common area, creating friendly competition. This improved rates of compliance with state regulations in excess of 25 percent in some areas. Changed reporting format from written- to computer-based, reducing time necessary to complete reports and create documents that could be easily retrieved. Served as the Drinking Water Program liaison to local health department staff, set up meeting agendas and guided discussions to create actionable results. Appointed program representative at Drinking Water Program regional meetings and communicated FDEP point of view on issues of concern.

Environmental Supervisor II; Drinking Water Program, FDEP—Adapted and improved approach to Drinking Water Program compliance. Changed approach from reactive to proactive, decreased violation of state rules, reduced paperwork and postage cost. Inspected drinking water processing plants for compliance with state regulations and evaluated water quality data to assure safety.

Environmental Specialist; Drinking Water Program, FDEP—Inspected drinking water processing plants for compliance with state regulations and evaluated water quality data. Negotiated settlements of enforcement cases.



BRADLEY S. PEKAS, P.G. P.E.

Principal/

Vice President, Geosciences

Project Assignment: Water Quality and Water Resources

Education

M.S., Geological Engineering—
South Dakota School of Mines
and Technology, 1987

B.S., Geological Engineering—
South Dakota School of Mines
and Technology, 1985

Years with ECT—22

Other Firms—3

Registrations

Professional Geologist
Florida, No. 1407

Georgia, No. 1528

Kansas, No. 683

North Carolina, No. 2286

Professional Engineer

Florida, No. 46867

Georgia, No. 33000

Kansas, No. 18770

Louisiana, No. 33028

Maryland, No. 35576

Michigan, No. 6201053459

South Carolina, No. 20351

Virginia, No. 0402-037852

NCEES Certificate No. 18078

Affiliations

Association of Groundwater
Scientists and Engineers (Na-
tional Groundwater Association)

American Water Works Associa-
tion

Order of the Engineer

Board of Associates of the
SDSM&T Foundation

Affiliate Member of Environmen-
tal and Land Use Legal Section,
Florida Bar Association

Vice President of SDSM&T

Alumni Association, Central
Florida

Areas of Specialization

Geology, Hydrogeology, Conta-
mination Assessment/Remedial
Action Studies, Groundwater and
Contaminant Transport Computer
Modeling, Geotechnical Investiga-
tions, Geophysics, and Water Use
Permitting

Project Manager; Science and Engineering Support Services, SWFWMD—Responsible for providing contract personnel to fill technical positions at District headquarters in Brooksville, Florida, as requested by the District. Assure the District is provided high quality services in the areas of hydrological modeling, water resource engineering, minimum flows and levels, watershed evaluations, data management, environmental resource permit reviews, and other services.

Project Hydrogeologist; Water Use Permitting for 800-MW Coal-Fired Power Plant in Florida for Joint Participants JEA, Florida Municipal Power Agency, Reedy Creek Improvement District, and City of Tallahassee; Sargent & Lundy—Responsible for modeling and impact assessment of groundwater well withdrawals for water supply for new coal-fired power plant in Taylor County, Florida.

Project Hydrogeologist; Currie Ranch Borrow Pit Water Use Permit, Currie Ranch Limited Partnership—ECT was authorized to prepare a water use permit application and develop a supporting conceptual groundwater flow model for the development of a sand borrow pit located in south central Sarasota County, Florida. The groundwater model (MODFLOW) was used to determine potential groundwater drawdowns associated with dewatering the mine pit, and evaluate several rim ditch recharge scenarios to mitigate withdrawal impacts.

Project Hydrogeologist; Wet-Weather Retention Pond Permitting, Utilities Commission, City of New Smyrna Beach (UCNSB)—ECT was retained by the UCCNSB to work with their engineering firm to perform the hydrogeologic evaluation and groundwater flow analyses pertaining to the use of converting an existing 14-acre retention pond to a wet-weather retention pond in Volusia County, Florida. As part of this assignment, ECT developed a three-dimensional numerical model (MODFLOW) that was used to simulate the potential mounding or drawdown that could potentially occur from the use of the pond for either water storage or withdrawals. ECT simulated a series of operation recharge and withdrawal rates for both a short-term and long-term stress periods to cover a large percentage of the probable operational variations. Additionally, to verify the numerical modeling results, ECT programmed a simplified analytical method (SJRWMD, 1993) in MathCAD™ to simulate groundwater flow out of a retention pond and to estimate the period required for pond recovery. This analytical approach simulated the surficial aquifer system as a laterally infinite, single-layered, homogenous, isotropic water table aquifer with a uniform thickness and a horizontal (flat) preloading (static) surface. Considering the differences between the two models, the agreement between the results was quite favorable. Due to the ease of use, the simplified analytical method was then used to perform predictive estimates for the radius of mounding/drawdown influence and necessary recovery periods associated with specified head changes within the pond and their corresponding volumetric changes. This information was to be used by during the wastewater treatment plant (WWTP) operations to assist in the determination of the volumes of water that can be recharged to or withdrawn from the pond to avoid any long-term impacts to nearby wetlands or adjacent property owners. In addition to the modeling analyses, ECT developed a groundwater monitoring program

ECT

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to satisfy regulatory requirements of the water management district and other permitting agencies.

Project Director; Onsite Hydrogeologic Testing Program; TPS-Dell, Arkansas—Designed and implemented an onsite hydrogeologic testing program to determine whether the Wilcox aquifer at the project site can supply 3.3 MGD of groundwater for operation of a power plant. This aquifer was selected largely because no other withdrawals were present in the aquifer within 30 miles of the site. ECT supervised the drilling and geophysical logging of two boreholes to a depth of 1,380 ft, lithologic logging and analyses of soil samples/cuttings, drilling and construction of two groundwater supply wells and an observation well that included pumping, and an aquifer test program for 7 days at 2,500 gpm. ECT analyzed the aquifer test data and completed a withdrawal impact analysis for the projected long-term drawdowns that would be induced by withdrawals of 3.3 MGD. In ECT's report, the availability of groundwater supply with regard to hydrogeologic criteria and regulatory criteria was also evaluated.

Project Hydrogeologist; Site Certification Application (SCA) for Midway Power Station, Panda Energy—Responsible for developing a regional groundwater flow model to evaluate the potential impacts to existing groundwater resources resulting from the proposed process withdrawals with an emphasis on drawdown and saltwater intrusion impacts, as required by the SFWMD. The plant is proposed with a nominal net 1,000-MW capacity in St. Lucie County, Florida. The evaluation included preparing a multilayer (three-dimensional) groundwater flow model to evaluate potential impacts from groundwater withdrawals. In addition to the numerical modeling efforts, additional analytical methods were used to determine the potential for saltwater upconing and intrusion. The analytical methods utilized included: upconing in a semi-confined aquifer, drawdown in coupled aquifer systems, salt water intrusion, and Gyben-Herzberg relationship. The results of the groundwater withdrawal and saltwater intrusion impact evaluation were incorporated into the SCA package, consumptive use permit application forms, and a separate detailed report included as a SCA appendix.

Project Hydrogeologist; SCA for Leesburg Power Station, Panda Energy—Responsible for evaluating the groundwater resources and geological/geotechnical suitability of a power plant siting and licensing study in Lake County, Florida. The plant is proposed with a nominal net 1,000 MW capacity. Responsible for collection, research, and evaluation of all pertinent data related to the preparation of hydrogeologic sections of a SCA. The evaluation included preparing a mass balance, hydraulic loading model to evaluate potential groundwater quality impacts resulting from sprayfield application of various power plant cycling/blowdown water quality scenarios. The results of the groundwater quality impact evaluation were incorporated into the SCA.

Project Hydrogeologist; SCA for Reliant Energy, Winter Haven Power Station—Responsible for evaluating the groundwater resources and geological/geotechnical suitability of a power plant siting and licensing study in Winter Haven, Polk County, Florida. The plant is proposed with a nominal net 1,000-MW capacity. Responsible for collection, research, and evaluation of all pertinent data related to the preparation of hydrogeologic sections of a SCA. The evaluation included preparing a mass balance, hydraulic loading model to evaluate potential groundwater quality impacts resulting from sprayfield application of various power plant cycling/blowdown water quality scenarios. Also, responsible for the evaluation of potential impacts attributable to onsite withdrawals of groundwater from the Floridan aquifer and participation in a water source alternatives analyses. The results of these efforts were incorporated into the SCA package.

Project Assignment: Water Quality and Water Resources

Education

Ph.D., Civil and Environmental Engineering—Utah State University, 2003

M.S., Statistics—Cairo University (Egypt), 1994

M.S., Irrigation and Hydraulics Engineering—Cairo University (Egypt), 1998

B.S., Civil Engineering—Cairo University (Egypt), 1983

Years with ECT—3

Other Firms—20

Registrations

Professional Engineer, Idaho, No. 13319

Affiliations

American Water Resources Association

American Water Works Association

American Society for Civil Engineers

Journal Reviewer, Journal of the American Water Resources Association

Journal Reviewer, Journal of Spatial Hydrology

Journal Reviewer, Environmental Monitoring and Assessment

Journal Reviewer, Environmental Management

Journal Reviewer, Ecological Economics

Areas of Specialization

Water Resources Engineering, Modeling, Hydrologic and Watershed Modeling, Modeling of Surface Water/Groundwater Interaction, Water Quality, Hydrodynamic Processes, Rainfall Interactions, Kinematic Overland Processes

Senior Engineer, SWFWMD—Responsible for surface/groundwater modeling, helping SWFWMD with special topics such as directly connected impervious areas, determining groundwater boundary conditions for regional modeling, modification of natural broad-crested weir coefficient, determining minimum level for lakes, estimating streamflow in the Peace River, and SWFWMD guidelines and specifications.

Assistant Professor and Geo-Spatial Outreach Coordinator; Boise Center Aerospace Laboratory, Idaho State University—Responsible integrating remote sensing and GIS technology into decision support systems, train irrigation district personnel in the use of remote sensing and GIS technology, and in the use of available data, as components of their decision support systems. Create an internet-based mechanism allowing all water-resource organizations readily to access each others' data, deliver remotely sensed data, such as Landsat ETM+ multi-spectral data, and value added remotely sensed data, such as Landsat-based evapotranspiration, over the internet, preparing reports and grant applications, and teaching statistics.

Post-Doc/Research Associate; Department of Civil and Environmental Engineering, University of South Florida—Responsible for modeling of surface and groundwater interactions, teaching hydraulics/water resources/advanced hydrologic models, preparing project reports and grant applications, and advising graduate students. Other projects included hydrologic modeling of ungauged streamflow in Charlotte Harbor for SWFWMD, comparing pre- with post-mining impacts on the Peace River, studying of the potential environmental impacts of a saltwater lake in the Sahara, and installation of soil moisture sensors at Taliaferro Research Park for Hillsborough County.

Research Assistant; Civil and Environmental Engineering Department, Utah State University and Idaho National Lab—Responsible for modeling water resources scarcity and build a Bayesian network Decision Support System for the Big Lost River, considered one of the important tributaries of the Snake River Plain, developing water quality index, and modeling of surface/groundwater interaction using MODFLOW and HSPF for the Snake River and Big Lost River in Idaho.

Deputy Project Director; National Water Resources Plan Project (Dutch Project) Egypt—Responsible for providing inputs for the water component of the National Investment Plans, creating strategic planning procedures within the government that enable an appropriate analysis of policies and investment for the Water Sector, managing a staff of 15 engineers for a major water resources engineering project sponsored by the Netherlands, preparing reports, reviewing reports, and managing all financial aspects of the project.

Manager of Technical Office; Ministry of Water Resources and Irrigation (MWRI), Egypt—Responsible for helping the decision makers by comprehensive studies about national projects, examining different scenarios for solving water resources problems, managing a staff of 23 engineers and other water resource personnel, preparing reports, and reviewing reports.



SHIRISH BHAT, Ph.D.
Senior Associate Engineer I

Project Assignment: Water Quality and Water Resources

Education

Ph.D., Civil and Coastal Engineering (Water Resources)—
 University of Florida, 2005
 M.S., Civil and Environmental Engineering—South Dakota State University, 1999
 B.S., Civil Engineering; Regional Engineering College, Warangal, India; 1994
 B.S., Statistics—Tribhuvan University, Kathmandu, Nepal, 1989

Years with ECT—4
Other Firms—5

Registrations

Stormwater Management Inspector, No. 22707

Affiliations

American Geophysical Union
 American Society of Civil Engineers
 American Water Resources Association

Areas of Specialization

Watershed Hydrology and Surface Water Chemistry, Land Use Impacts on Surface Water Quality and Quantity, Riparian Area Nutrient Dynamics, Water Resources Management, Hydrologic and Hydraulic Modeling and Design, Minimum Flows and Levels, Total Maximum Daily Loads, Geographic Information Systems, Wetland Biogeochemistry

Project Engineer; ERP Application Review, NFWFMD—Conducted permit reviews on behalf of NFWFMD for various ERP applications associated with stormwater management for commercial, residential, and institutional development. Conducted site investigations and prepared review reports based on NFWFMD's rules and design requirements.

Project Engineer; Carrabelle Wharf, City of Carrabelle—Conducted water quality assessment to evaluate turbidity impact of the dredging activity, using DREDGE model. Assisted in preparing conceptual design and marina slip layout for the Carrabelle wharf in the Florida Panhandle.

Project Engineer; Suwannee River Water Quality Analysis, Florida Department of Health—Evaluated current water quality condition of a segment of Suwannee River in the vicinity of the town of Suwannee and the condition prior to the construction of the WWTP and subsequent abandonment of onsite sewage and treatment disposal systems. Compared pre- and post WWTP construction water quality data to determine if there has been any significant change in water quality. Assisted in preparing final report.

Project Engineer; ERP Applications, Energy 5.0, LLC—Performed hydrologic and hydraulic modeling to evaluate the potential impact of the construction of a proposed 25-MW utility grade solar power generating facility in Polk County, Florida. Assisting in preparation of an ERP.

Project Engineer; ERP and NPDES Permit Applications, Southern Monitoring and Environmental, LLC—Assisted in surface water assessment to evaluate the potential impact of the construction of a proposed bulk terminal for Keystone Properties in Jacksonville, Florida. Assisting in preparation of an ERP and modifying an existing NPDES permit.

Project Engineer; Newnans, Lochloosa, Harney, and Monroe Lakes Nutrient Study, SJRWMD—Assisted in setting up automated samplers and collecting the storm samples. Collected and synthesized rainfall, velocity, and stage from each of the tributary to the lakes. Determined nutrient input to the lakes during storm events. Performed basin delineation using ArcGIS. Assisted in report writing.

Project Engineer; Hydrologic and Hydraulic Modeling, Turnbull Sod Farm—Performed a hydrologic and hydraulic modeling for a proposed 216 acres sod farm in St. Johns County, Florida, for 25-, 50-, 100-, and 500-year storm events using ICPR. Analyzed the modeling results.

Project Engineer; Kathleen Materials Hydrologic and Hydraulic Modeling, Lane Construction Corporation—Performed a hydrologic and hydraulic modeling for a proposed 246-acre Phase-II mining site in Polk County, Florida, for mean-annual, 25-, and 100-year storm events using ICPR. Analyzed the modeling results, and prepared a stormwater management plan and ERP application for Phase II mining.

Project Engineer; Hydrologic and Hydraulic Modeling, Williams Farm—Performed hydrologic and hydraulic modeling to determine the effects of canal maintenance on the flood event at Williams Farm during Hurricane Wilma using ICPR.



Project Manager; Literature Review of Sediment Nutrient Flux in Shallow Lakes, SJRWMD—Conducted a thorough literature search on sediment flux measurement methods in shallow lakes, and peer reviewed a report on nutrient flux measurement.

Project Engineer; Evaporation Pond Analysis, Navasota Energy—Performed hydrologic and thermal balance analysis to evaluate the design of an evaporation pond at the Odessa Power Plant in Odessa, Texas using CEQUAL-W2 model.

Project Engineer; Polk Power Station (PPS) Stormwater Management Plan, Tampa Electric—Prepared a stormwater management plan pursuant to Chapters 62-25, 62-40, and 40D-4, Florida Administrative Code, to handle stormwater runoff from the altered portion of the PPS site in Polk County, Florida, resulting from the construction and operation of the proposed Polk Unit 6.

Project Engineer; Ortiz Avenue Bridge Extension Project, Lee County Department of Transportation—Involved in sediment scour analysis associated with the existing bridge extension, determined abutment and contraction scour for 50-, 100-, and 500-year storm events using HEC-RAS.

Project Engineer; Eau Gallie River Bridge Hydraulics, WBQ Design & Engineering, Inc./FDOT—Involved in hydraulics and sediment scour analysis associated with the bridge construction, determined 50-, 100-, and 500-year stages, discharges, and velocities in the Eau Gallie River at the proposed bridge site in Brevard County, Florida. Conducted scour analysis at the proposed bridge using HEC-RAS, FHWA's HEC-18, and Florida Complex Pier Scour Procedure.

Project Engineer; Lake Monroe MFLs Assessment, SJRWMD—Involved in preparing final report and peer review resolution document on human use and water resource values assessment for Lake Monroe minimum levels considered by SJRWMD. Conducted water quality assessment to evaluate the surface water withdrawal on Lake Monroe water quality.

Project Engineer; Cannon Creek Basin Assessment, SRWMD—Involved in hydrologic and water quality assessment for Cannon Creek Basin in Columbia County, Florida. Conducted data analysis to identify flooding and water quality problems in the watershed and prepared assessment report.

Project Engineer; Nutrient Budget Assessment for Big Bend Station, Tampa Electric—Responsible for nutrient budget analysis to evaluate the reduction of nitrogen deposition from the atmosphere to Tampa Bay/Hillsborough Bay. Assessed the total nitrogen balance and net nitrogen loads to Hillsborough Bay. Compiled and analyzed water quality data in Tampa Bay Estuary to characterize ambient water quality.

Project Engineer; Selenium Assessment, Seminole Electric Cooperative, Inc.—Compiled and analyzed selenium data to assess selenium toxicity from the plant discharges and to characterize ambient selenium in the St. Johns River near Palatka, Florida. The information was used to conduct mixing zone analysis for the plant outfall.

JAMES E. POPPLETON

Senior Scientist II

Project Assignment: Wetlands/Ecology

Ecologist; Wetland Ecology, Sprout Project, City of Gainesville—Conducted all plant ecology field work including vegetation mapping, wetland delineation, functional assessments of wetlands and permit preparation for Phase I of a coal tar clean-up site in Gainesville, Florida. Assisted project engineers in designing post clean-up mitigation for inclusion in a city park master plan development including lakes, natural areas, and boardwalks.

Education

M.A., Botany—University of South Florida, 1976

B.S., Botany—University of Central Florida, 1972

Years with ECT—21

Other Firms—14

Affiliations

Society of Wetland Scientists

Florida Association of Environmental Professionals

Florida Academy of Science

Member; Wetlands Management Advisory Council, Sarasota County Board of County Commissions

Advisor; Governor's Commission on the Future of Florida's Environment

Areas of Specialization

Environmental Permitting, Ecological Assessments, Wetlands Mitigation and Restoration, Endangered Species Assessments, Wetland and Ecological Studies, and Plant Taxonomy

Task Manager; Vegetation Ecology, Volusia County Stormwater Park, Volusia County—Managed vegetation mapping efforts, wetland delineation, functional assessments of wetlands and park design for a storm water retrofit design project for Volusia County, Florida. Design components including working with project engineers and Volusia County personnel on mitigating impacts associated with stormwater improvements as well as designing wetland enhancement and upland restoration areas as amenities to the plan for a public park on the site in New Smyrna Beach, Florida.

Task Manager; Vegetation Ecology and Wetland Permitting, Brandon Shores to Riverside Transmission Line, BG&E—Conducted field studies to evaluate a proposed corridor for a 230-kV transmission line upgrade focusing on listed plant and animal species, wildlife utilization, forest resources, and wetlands in Baltimore City, Anne Arundel, and Baltimore City, Maryland. Prepared ecology portions of Sections 2 and 4 of the Certificate of Public Convenience and Necessity (CPCN) and direct testimony for CPCN hearings. Also prepared all necessary information for submission of a Joint Application for submission to the Maryland Department of the Environment (MDE) and the USACE for wetland impacts.

Task Manager; Vegetation Ecology, Dan's Mountain Project, U.S. Wind Force, LLC—Completed ecological field studies on several hundred acres on the ridge top of Dan's mountain in Allegheny County, Maryland, to gather information on forest extent and quality, delineate wetlands, and search for listed plant species. The site is proposed for the construction of 44 windmills to provide clean electrical energy. This information will be used to complete appropriate sections of a CPCN and wetland permit application to be submitted in 2005.

Task Manager; Ecology, Liberty Gap Wind Farm, Liberty Gap, LLC—Supervised and participated in an ecological survey of the ridge on Jack's Mountain in Pendleton County, West Virginia. Several hundred acres were traversed to determine the suitability for construction of 44 windmills to generate electricity. Duties included a detailed search of rock habitat for the occurrence of listed plants and animals with unique ecological requirements known to exist in the region. In addition, several parcels of adjacent land were inspected to determine the suitability for construction of access roads to the wind towers from an ecological perspective

Discipline Manager; Vegetation Ecology, AvMed—Completed detailed vegetation survey on 200+-acre parcel in Gainesville, Florida, proposed for hospital expansion and commercial/residential development to delineate wetlands, evaluate vegetation community types and quality, and document the presence or absence of listed plant species. Completed all pertinent portions of the DRI document regarding upland and wetland vegetation.

Task Manager; Vegetation Ecology, South Ft. Meade Mine Extension, Cargill Fertilizer, Inc.—Prepared plan of study and budgets for vegetation

ecology portions of a proposed ADA for Cargill's 11,500+ acre mine extension site in Hardee, County Florida. Tasks included negotiations for the plan of study with Hardee County officials, the Central Florida Regional Planning Council, and FDEP's Bureau of Mine Reclamation. Managed up to three teams of ecologists to conduct mapping, functional assessments of wetlands (Wetland Rapid Assessment Procedure [WRAP] for the USACE; UMAM for FDEP), and intensive listed plant species evaluations using GPS. Oversaw all data input into GIS and QA/QC of data input and mapping efforts. Worked closely with client and agencies at all steps of project.

Discipline Manager; DRI Statement, Nu-Gulf Industries, Inc.—Directed and participated in ecological studies for a 4,500-acre phosphate mine in Manatee County, Florida. Duties included rare and endangered species evaluations, and identification of unique habitats and wetland assessment. Managed coordination of federal, state, regional and local agency jurisdictional delineations for permitting.

Project Manager; Postoperational Wetlands Monitoring, U.S. Generating Company—Prepared 5-year monitoring plan submitted to and approved by Martin County Planning Department, SFWMD, and FDEP. Conducted field work to gather data on preserved isolated wetlands to monitor possible effects on these wetlands due to the operation of a 300+ MW coal-fired electrical generating facility.

Ecology Discipline Manager; Siting Analysis for a Proposed Electrical Generating Facility, TECO Power Services Corporation—Conducted an ecological evaluation of a site near the International Airport in Panama City, Panama, being considered for development of an electrical generating facility.

Project Ecologist; Environmental Impact Assessment (EIA) for 120-MW San José Power Plant, Central Generadora Electrica San José, Ltda.—Responsible for vegetation and wetland surveys for EIA for 120-MW coal-fired power plant in Puerto Quetzal, Guatemala. Conducted transect surveys of mangrove areas which is a protected tree species in Guatemala and developed mitigation plan for mangrove replanting.

Project Scientist, Ecological Studies in Central and South America, National Science Foundation—Conducted ecological field studies focused on epiphyllous fungi and their hosts, including mangroves, in various areas of Central and South America including Belize, Honduras, El Salvador, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Venezuela, Puerto Rico, and Jamaica.

MAYA R. SCOHIER, PWS
Senior Associate Scientist I
Project Assignment: Wetlands/Ecology

Education

B.A., Environmental Science—
University of Florida, 2002

Years with ECT—5
Other Firms—3

Registrations

Professional Wetland Scientist,
No. 1999

Maryland Qualified Professional
Stormwater Erosion and Sedimen-
tation Control Inspector, FDEP
No. 6566

Certified, Mine Safety and Health
Act training

Affiliations

Member of the Florida Native
Plant Society

Areas of Specialization

Environmental Permitting,
Terrestrial and Wetland Ecology;
Wetland Jurisdictional
Determination, Delineation, and
Permitting; Wildlife and
Endangered Species Surveys;
Land Use/Cover Mapping; Tree
Surveys; Mitigation Monitoring

Project Ecologist; Wetland Delineation and Threatened and Endangered Species Search, SeaCoast Natural Gas Pipeline Project; TECO Peoples Gas—Set joint FDEP/USACE wetland delineations along a 50-mile long SeaCoast proposed gas pipeline corridor in Jacksonville, Florida. Conducted threatened and endangered species searches along proposed corridor and photo-documented current conditions of the wetlands.

Project Ecologist, Vegetation Mapping and Threatened and Endangered Species Search, Southern Company Generation—Conducted wildlife surveys and examination of habitats present on Mississippi Power's 1,650-acre tract of the proposed IGCC generating station in Kemper County, Mississippi. Incorporated the survey results into a listed species report, which served as an attachment to the EIS, prepared for DOE.

Wetlands Ecologist; Taylor Energy Center Licensing, Sargent & Lundy, LLC—Served as wetlands ecologist for Florida Municipal Power Agency's project involving 3,200 acres in Taylor County, Florida, proposed for a coal-fired power plant to be licensed through the Florida Electrical Power Plant Siting Act. Duties included wetlands delineations, hydric soils assessments, UMAM, and permit application preparation.

Project Ecologist; Lake Monroe Minimum Flows and Levels Assessment, SJRWMD—Conducted human use and water resource values assessment for Lake Monroe minimum levels considered by SJRWMD. Specifically, participated in assessing lake bathymetry conditions allowing for gradual downslope migration of desirable wetland communities in response to changes in water level by examining water depth at the waterward extent of emergent vegetation and mapping emergent vegetation communities onto a bathymetric map of Lake Monroe.

Project Ecologist; Mosaic Ona Mine Permitting Project; Mosaic Fertilizer, L.L.C.—Performed wetland functional assessment, using Uniform Wetland Assessment Method (UMAM), for 20,500-acre site proposed for surface phosphate mining in the Hardee County, Florida. The assessments entailed qualitatively and quantitatively characterizing location and landscape support, water environment, and community structure of each wetland in reference to high quality wetlands of the same type. Participated in field-meetings with the FDEP to review the scoring of the functional wetland assessments. The project required significant internal and agency coordination to ensure consistency among ecologists and reviewers.

Field Supervisor, Vegetation Ecology, Southern Company Generation—Assisted in managing all ecological tasks associated with the approximately 156 miles of linear facilities (natural gas and reclaimed effluent pipelines, transmission lines, and carbon dioxide pipeline) associated with Mississippi Power's proposed IGCC generating facility located in Kemper County, Mississippi. Duties included arranging logistics; leading several field crews; and gathering/analyzing vegetation data on uplands, wetlands, and listed species. Assisted in incorporating results from the linear facilities studies as well as data gathered by other consulting firms for an approximately 1,600-acre power plant site and a 31,000-acre lignite mine site into an environmental impact statement (EIS) prepared for the DOE. Also produced two Preliminary Wetland Jurisdictional Form packages for submission to the USACE.



Project Manager; Gopher Tortoise Survey for City of Ocala, Central Testing Laboratory—Conducted a gopher tortoise survey on two parcels of land under the ownership of the City of Ocala, following the latest guidelines and methods outlined by Florida Fish and Wildlife Conservation Commission in Marion County, Florida.

Project Ecologist; SJRWMD—Participated in evaluating the area known as Dog Branch in Putnam County, Florida, for the purposes of recommending the planting plan.

Task Manager, Vegetation Ecology/Wetlands Permitting, BGE—Managed and directed field efforts to acquire data sufficient to satisfy the requirements of a Certificate of Public Convenience and Necessity. In addition, led wetland delineation efforts for the upgrade of transmission corridors in Harford, Anne Arundel, and Baltimore Counties, Maryland.

Project Ecologist; Lighthouse Harbor, Pringle Properties—Served as a project ecologist to delineate wetlands, assess hydric soils, prepare UMAM forms, and prepare permit application for a marina proposed to be located on the north shore of Little Lake Harris in Lake County, Florida.

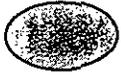
Project Ecologist; Pine Level, Mosaic Fertilizer, L.L.C.—Served as an ecologist and a team leader to review, revise, and re-map the land use/cover on an approximately 24,000-acre tract of land located in both Manatee and Desoto Counties.

Project Manager; Wetland Due Diligence, The Epoch Corporation—Conducted an overview of the 2,000-acre project site in Bay County, Florida, to determine the general extent and quality of wetlands and habitats known to support listed species.

Project Ecologist; Wetlands Mitigation, Ellis Environmental—Assisted in coordinating the planting of vegetation in a tidally influenced area of the Mayport Naval Station in Duval County, Florida. Conducted monitoring and made recommendations biannually for the site.

Wetlands Ecologist; Development of Regional Impact Substantial Deviation, AvMed—Served as wetlands ecologist on a 186-acre property in Alachua County, Florida, proposed for a hospital satellite campus. Duties included wetlands delineations review with agency staff, hydric soils assessment, and research of local regulations pertinent to water resources buffers.

Project Ecologist; Dans Mountain Windforce, LLC—Served as an ecologist for proposed 69.6-MW renewable wind energy electric generating facility in western Allegany County, Maryland. Duties included wetlands delineations, hydric soils assessments, and permit application preparation.



MARK SEIBEL, GISP
GIS/CAD Manager
GIS Analyst/Programmer
Project Assignment: GIS/CADD

Education

B.S., Environmental Studies—
Richard Stockton College of
New Jersey, 1996

Years with ECT—13
Other Firms—2

Registrations

Certified GIS Professional (GISP)

Areas of Specialization

GIS Analysis and Modeling; Open
Source Web-Mapping Services
and GIS Software on Linux and
Linux Server Administration;
GRASS GIS; ESRI ArcGIS for 2-
and 3-D Modeling and Cartography;
ARC/INFO Workstation for
GIS Data Analysis, Modeling,
Creating, and Editing Coverages;
GIS Programming with AML;
Web Programming with Perl

Senior GIS Analyst; Hydrologic Analysis, Mosaic Fertilizer, L.L.C.—Processed .las LiDAR files into a DEM to subsequently run hydrologic tools. Features were extracted such as: flow accumulation, streams, problematic drainage areas, downslope flowlines, potential seepage slopes, major basins, sub-basins and contributing areas to flow stations. Project wide cell model size was 25 feet; however, 5-foot cells were utilized for more detail in areas of interest. Project sizes were 16,000 acres and 21,000 acres.

Senior GIS Analyst; Watershed Modeling Support, SWFWMD—Modeled a problematic internally drained watershed with GRASS (Geographic Resource Analysis and Support System) GIS, using a variety of tools including lake package for flooding, accumulation maps for illustration of concentrated flow, terraflo module for illustrating potential problem areas with ponding, and the watershed model to delineate watershed divides.

Senior GIS Analyst; Lane Construction—Post reclamation design of over 100 acres of terrain in Polk County, Florida. Included the construction of two deep-water lakes with specific design parameters. Used custom built script to automate stage-storage analysis within these lakes.

Senior GIS Analyst; Mosaic Fertilizer, L.L.C.—Utilized GRASS GIS for raster analysis. Created raster surfaces from vector contour lines for water table and land surfaces (pre and post). Built color-shaded relief maps for illustrative purposes. Slope maps were derived from the interpolated surfaces. In one application, slopes were used to characterize and compare pre-mining and post reclamation streams. In another application, water table slopes were modeled and various map calculations were applied on a cell-by-cell basis (e.g., water table thickness multiplied by water table slope). Various GRASS hydrologic tools were used to build features such as land surface flow lines and carve stream depressions into the raster surface. Other hydrologic tools were used to delineate watersheds, approximate flow accumulation at watershed outlets, and identify channelized streams. Flow accumulations were used as input for calculations to build specific post reclamation stream geometry, which resulted in an engineering firm creating a post-mining floodplain area for a given stream segment. True 3D views were used to investigate various areas of interest.

Web Mapping Programmer and Linux System Administrator; Mosaic Fertilizer, L.L.C.—Deployed web-based GIS mapping application to consulting team for land development analysis, on an open source platform. System serves over 3GB of aerial photography and 100 GIS vector datasets. Duties entailed configuring and administering Linux server, installing and configuring related open source GIS software on system, and configuring and monitoring Apache web server. Web mapping software used is UNM's Mapserver. Programming languages include HTML, CGI, and Javascript. Current efforts entail re-writing the web application with PHP, under Mapserver/Mapscript for advanced mapping functionality.

Senior GIS Analyst/Programmer; CF Industries—Responsible for hands-on and managerial tasks pertaining to generating GIS land use data for 6,751 acres in Polk and Hardee Counties, using Arc/Info Workstation coverages and ArcMap for cartographic functions. Jurisdictional data were provided by team consultants which was used as baseline information to build the land use data from this jurisdictional data.

Senior GIS Analyst/Programmer; Mosaic Fertilizer, L.L.C.—Responsible for hands-on and managerial tasks pertaining to generating and creating GIS data for proposed phosphate mining permit submittal. Project involves mapping more than 10,000 acres of various features with global positioning system (GPS) technology and 1-meter digital orthographic quarter quads. Examples of some of the features mapped were land use, listed species for wildlife and plants, proposed monitoring wells, and pedestrian and vehicular transects. Efforts included programming ArcPlot Arc Macro Language (AMLs) to expedite the mapping process through automation of map plotting, and using ArcEdit to create and manage many various GIS data sets. Using GIS to display WRAP database scores in conjunction with sub-surface features to determine maximum mining effectiveness while balancing the preservation of high quality wetlands on the site.

Senior GIS Analyst (Modeling); Mosaic Fertilizer, L.L.C.—Performed kriging spatial analysis and modeling of sub-surface features such as phosphate pebbles, phosphate concentrates, and percent clay and chemical concentrations such as magnesium oxide. Spatial Analyst of the ESRI ArcGIS suite was used to perform these analyses, using raster data models. Once surface and subsurface features had been modeled, additional analyses were performed to provide information to the client to make informed decisions about wetland quality, impacts, mitigation, and sub-surface value.

Senior GIS Analyst; Florida Gas Transmission—Mapped and constructed two mitigation areas (10.8- and 10.6-acres) using GPS technologies, traditional surveying techniques, and GIS. The project had several phases; first, project boundary coordinates were imported from a surveyor into the GIS system. Then ECT generated points in GIS that delineated the needed acres for clearing and mitigation. After uploading the GPS points to the GPS Unit, a field crew used a bulldozer and GPS unit to clear the needed areas, based upon the GIS coordinates generated in the office. Additional points were taken from the field and integrated into the GIS data. Exact acreages (to the tenth of an acre) of mitigation were able to be performed using GIS and GPS jointly.

Senior GIS Analyst; Central Florida Regional Planning Council—For the first time in the Tampa Bay region, a historical analysis of phosphate mining in the Peace River Basin was performed using GIS. This mapping analysis involved analyzing *1.5 million acres* of land in three 25-year time frame snapshots: 1975, 2000, and 2025. Dozens of historic and current properties were integrated into this land use data set, from various sources such as: historic paper maps, digital CAD DXFs, ESRI Shapefiles and Arc/Info coverages. Analysis revealed a trend showing mining activities decreasing, while human population explosion growths were illustrated as being the major consumers of regional water in the Peace River Basin.

Senior GIS Analyst (Modeling); Gainesville Regional Utilities—Performed contaminant mapping and analysis based upon real field data from soils borings and monitoring wells. This site dealt primarily with sub-surface coal-tar contamination originating from a former manufactured gas plant site. Using ArcView 3.2, Spatial Analyst and 3-D Analyst add-on extensions, a true sub-surface 3-D solid contaminate model was developed. This involved using some non-ESRI specific data models such as the “multi-patch” model. Subsequently, this model was taken to the client site and used a projector and PC to show the analysis and 3-D view of the site. This presentation aided in clearly communicating what was occurring at the site.

MICHAEL A. RACCA
Senior Technician I
Project Assignment: GIS/CAD

Years with ECT—3
Other Firms—8

Registrations

Certificate- CADWorx Plant Professional Training
Certificate - Manual Drafting & Design; Architectural Commercial & Building Design
Certificates-Civil 3D; Land Desktop; Autodesk Inventor Series and Professional (Piping, Cable & Harness); Land Desktop; AutoCAD Autodesk; AutoCAD Electrical

Areas of Specialization

AutoCAD Drafting and Design, Site/Facility Plans, Drawings, and All Phases of Final Construction Drawings (Plans, Sections, Cross Sections, and Details); Georeferencing Sites onto USGS Quad Maps and Conversion of Drawings to Different Coordinate Systems (i.e., State Plane, UTM, Lat-Long)

AutoCAD Specialist; Avenue C North Drainage Improvements, City of Carrabelle—Prepared CAD and GIS graphics as required for design and permitting of retrofit for existing drainage infrastructure located in the Carrabelle, Florida, including: (1) replacement of an existing dry detention pond with a larger wet detention pond; (2) replacement of an existing, sediment-filled cross-drain and provision of sediment removal features; and (3) stabilization of existing scour-prone areas to reduce erosion and sedimentation.

AutoCAD Specialist; CR-30A Drainage Improvements, City of Carrabelle—Prepared CAD and GIS graphics as required for design and permitting to replace and harden a failing double 60-inch cross-drain, headwall, and end-wall system; stabilize erosion prone areas; and provide a weir structure upstream from the cross-drains.

AutoCAD Specialist; Monticello Pines Planned Residential Development and Phase I Final Development Plan Design, Monticello Plantations, LLC—Prepared CAD and GIS graphics as required for civil engineering planning, design, and permitting services for water, sewer, roadway, grading and stormwater infrastructure in the 115-acre first phase of a new 421-ac single-family detached housing planned residential development in Monticello, Florida. Phase I included 133 residential units, common area parks, and walking/cycling trails

AutoCAD Specialist; Incinerator Ash Building Demolition, City of Tallahassee—Prepared CAD and GIS graphics as required for incinerator ash building demolition brownfield project in Tallahassee, Florida.

AutoCAD Specialist; Phase II ESAs, Numerous Clients—Prepare AutoCAD graphics to include location of site, soil, and groundwater contamination maps; and soil boring and monitoring well locations concerning sites in North Florida that have environmental contamination.

AutoCAD Specialist; Environmental Remediation Programs; Numerous Clients—Prepare graphics in AutoCad for reports, including construction and as-built drawings for vacuum extraction systems, air sparging systems, site plans, trenching layouts, recovery well details/sections, equipment trailer layout, and electrical control systems.

AutoCAD Specialist; Phase I ESAs, Albertson Express Stations—Prepared CAD and GIS graphics for 15 site-specific reports, showing site locations, property boundaries, and site plan maps with details of each station.

AutoCAD Systems Specialist; CAD Centers of Florida—Implemented software/applications procedures to streamline design processes of engineering department. Developed CAD standards manual, provided AutoCAD training and various software applications.

Project Assignment: Field Services

Education

A.S., Environmental Technology—Santa Fe Community College, 1977

Years with ECT—11

Other Firms—23

Registrations

SCUBA

Coast Guard Auxiliary Boating

Skills and Seamanship

40-hour OSHA hazardous waste health and safety training

24-hour health and safety training for supervision of hazardous waste activities

Affiliations

Florida Ground Water Association

Florida Society of Environmental Analysis

Areas of Specialization

Surface Water Quality and Hydrology Studies; NPDES Permitting; Coordination and Oversight of Field Studies including Water Quality Sampling and Hydrology Measurements, Dye Tracer Studies, and Bathymetry Surveys; Quality Assurance/Quality Control Program Development; Environmental Instrumentation Operation and Maintenance; Data Validation and Management

Project Manager; Stormwater Flow Monitoring and Data Collection, SJRWMD—Responsible for designing and installing ISCO® sampling and flow monitoring systems on tributaries to Newnans Lake, Lake Lochloosa, Lake Monroe, and Lake Harney to collect stormwater data and assess nutrient loads from the tributaries.

Project Scientist; Lake Jesup Stormwater Sampling, Seminole County—Assisted with the stormwater sampling program using ISCO samplers at five tributaries to Lake Jesup. Project conducted to assess nutrient loading from the five tributaries to the lake during storm events.

Field Sampling Coordinator; Watershed Assessment, Mosaic Fertilizer, L.L.C.—Responsible for maintaining a 17-station monitoring network and associated water quality sampling and analysis to determine the baseline water quality of the South Fort Meade mine site extension in Hardee County, Florida. Sampling was conducted both monthly and quarterly for 27 parameters, including nutrient loading.

Field Team Leader; Water Quality Studies, City of Port St. Joe—Coordinated and supervised diurnal oxygen and intensive water quality studies consisting of continuous 48-hour *in situ* water quality profiling at multiple stations. Intensive water quality sampling was conducted concurrently with *in situ* profiling and consisted of collecting over 600 samples for chemical analyses.

Field Team Leader; Water Quality Study, SECI—Study conducted to characterize ambient water quality and hydrographic conditions of the Fenholloway River and several of its tributaries for regional impact study. Responsible for the installation and maintenance of water level recorders, thermographs, and recording dissolved oxygen meters. Conducted monthly water quality sampling and discharge measurements on the Fenholloway River and tributaries.

Task Manager/Field Team Leader; QBEL Study, City of Port St. Joe—Assisted with design and construction of curtain drogues, and coordinated and supervised continuous 48-hour drogue tracking surveys for large-scale Lagrangian current circulation studies.

Field Team Leader; Site Monitoring at Florida Rock Industries, City of Newberry—Responsible for annual DRI monitoring program to assess contamination potential in groundwater, surface water, and soils on Florida Rock Industries' properties located in Newberry, Florida. All sampling is conducted in compliance with FDEP QA/QC requirements/guidelines.

Project Manager; Rice Creek Water Quality Study, Georgia Pacific—Assessed paper mill effluent ability to meet Class III water quality standards after completion of mill process up-grades in Putnam County, Florida.

Field Team Leader; Land Acquisition Project, SFWMD—Coordinated and supervised multiple field teams responsible for installation and sampling of groundwater monitoring wells, collection of surficial soil samples, and irrigation canal sediment samples at large agricultural sites. Sites were being evaluated for possible District acquisition as part of the Everglades Restoration Project. Approximately 6,000 acres of property were screened for groundwater and soil quality determination.

Task Manager; Groundwater Discharge Permitting, PacifiCorp—Responsible for acquisition of all data and information for preparation of a state-required groundwater discharge permit for a proposed 1,000-MW power generating facility. The permit was necessary for operation of evaporation ponds at the facility in Mona, Utah, to dispose of process wastewaters.

Project Manager; Orange Lake Sediment Consolidation Study, SJRWMD—Coordinated field surveys of drought-exposed top of sediment elevations and thickness for comparison with pre-drought survey data to assess possible sediment reduction caused by exposure to atmosphere and other oxidation process. Orange Lake reaches parts of Orange, Lake, Marion, and Alachua Counties.

Project Manager; Payne Creek Generating Station Cooling Reservoir Thermal Study; SECI—SECI Payne Creek Station will discharge heated condenser cooling water to a 570-acre cooling reservoir. The reservoir also receives heated condenser cooling water from another power generating facility which was built prior to and adjacent to SECI's facility in Hardee County, Florida. The thermal study involved installation of a network of recording thermographs in the reservoir to develop a comparative database to evaluate the heat dissipation characteristics of the reservoir prior to and following the Payne Creek Station startup.

Project Manager; Phase I ESA; Bell Mountain, Inc.—Conducted an ESA of a 500-acre site in Marion County, Florida, following ASTM standard practice protocols for site assessments.

Project Manager; Phase I ESAs, Adena Springs, South—Conducted Phase I ESAs of 600- and 1,640-acre tracts in Marion County, Florida, following ASTM standard practice protocols for site assessments.

Project Manager; Lake Griffin Access Canals Sediment Study; Lake County Water Authority—Project was a component of the Lake Griffin restoration program and involved cross-section measurements of sediment accumulation depths in 30 lake access canals. Additional task included collection of over 2 tons of sediment from 45 locations for chemical and physical characteristics analyses.

DAVID J. SANDERS, E.I.
Associate Engineer I

Project Assignment: Construction Administration

Project Engineer; Avenue C North Drainage Improvements, City of Carrabelle—Supported design and permitting services for retrofit of existing drainage infrastructure located in the City of Carrabelle, Florida. Project involves (1) replacement of an existing dry detention pond, previously permitted to serve a 7-acre drainage area, with a larger wet detention pond to treat runoff from a total contributing area comprising 27.5 acres; (2) replacement of an existing, sediment-filled cross-drain and provision of sediment removal features, with the improved cross-drain discharging to the new wet detention pond; and (3) stabilization of existing scour-prone areas to reduce erosion and sedimentation.

Education

B.S., Civil Engineering—Florida State University, 2009

Years with ECT—3
Other Firms—0

Registrations

Engineering Intern, Florida,
No. 1100013846

Areas of Specialization

Stormwater Design and Permitting, Construction Documents, Field Services, Petroleum Remediation Activities

Project Engineer; CR-30A Drainage Improvements, City of Carrabelle—Supported design and permitting services for replacement and hardening of a failing double 60-inch cross-drain, headwall and endwall system, stabilization of erosion prone areas and provision of a 1.5-foot high weir structure upstream from the cross-drains to maintain a quiescent pool for erosion control and sediment removal.

Project Engineer; New Planned Unit Development and Phase I Final Development Plan Design, Monticello Plantations, LLC—Assisted civil engineering design team in development of design and permitting documentation for water, sewer, roadway, grading, and stormwater infrastructure in the 115-acre first phase of a new 421-acre single-family detached housing residential planned unit development in Monticello, Florida. Development includes 133 residential units, common area parks, and walking/cycling trails.

Project Engineer; Engineering and Permitting Services for Domestic Wastewater Treatment Facility, Capital City Travel Center—Supported engineering consulting and permitting services for a privately owned extended aeration activated sludge domestic wastewater treatment and reuse system with two rapid infiltration basins in Lloyd, Florida. Assisted in preparation of application and associated documentation for permit renewal at a permitted capacity of 0.0175 MGD.

Technical Support; ERP Program Support, NFWFMD—Assisted project team with completeness reviews of approximately 30 stormwater ERP applications by performing ground-truthing site inspections and technical reviews of construction plans and specifications, stormwater design calculations, and related documentation.

Field Supervisor; Rhoden Cove Ecological Restoration, Leon County—Supervised field activities for a large ecological restoration, which included the eradication of non-native invasive plant species and the reintroduction of more native species around the Lake Jackson area.

Technical Support; Hopkins Copper Study—Collection of water samples from the City of Tallahassee's Hopkins power plant discharge stream for trace copper analysis.



APPENDIX C
WBE/MBE CERTIFICATIONS

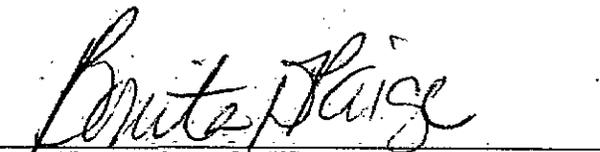


This certifies that
**ENVIRONMENTAL AND GEOTECHNICAL
SPECIALTIES, INCORPORATED**
is recognized as a
Minority/Women-Owned Business Enterprise
under the
**City of Tallahassee and Leon County
Consortium Interlocal Agreement**

For a period of one (1) year beginning:
May 18, 2010 to May 31, 2011



MBE Administrator



Certification Specialist



State of Florida
*Minority, Women &
Service-Disabled Veteran*
Business Certification

IntraNet Lab Services, LLLP

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

September 15, 2009 to September 15, 2011

Torey Alston, Executive Director

*Florida Department of Management Services
Office of Supplier Diversity*



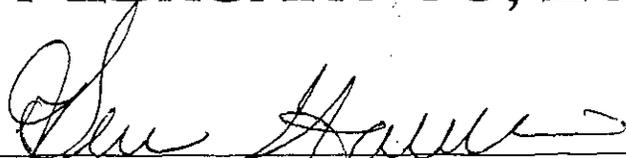
This certifies that

INTRANET LAB SERVICES, LLLP

is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:

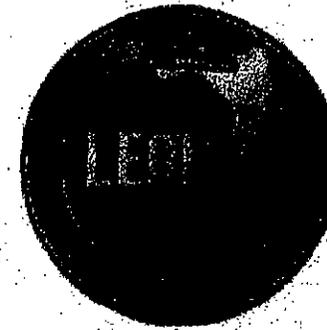
FEBRUARY 16, 2011 TO FEBRUARY 29, 2012



MBE ADMINISTRATOR



CERTIFICATION SPECIALIST



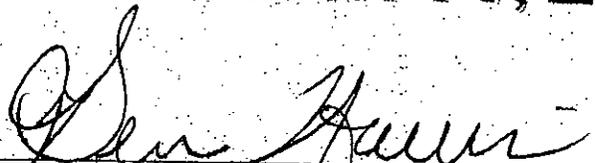
This certifies that

DIVERSIFIED DESIGN & DRAFTING SERVICES, INC.

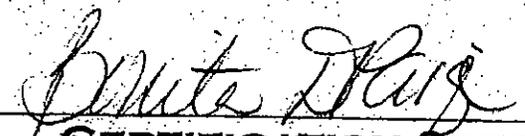
is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:

MARCH 11, 2011 TO MARCH 31, 2012



MBE ADMINISTRATOR



CERTIFICATION SPECIALIST



State of Florida
*Minority, Women &
Service-Disabled Veteran*
Business Certification

Archaeological Consultants, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

February 5, 2010 to February 5, 2012

Torey Alston, Executive Director

*Florida Department of Management Services
Office of Supplier Diversity*



This certifies that
ARCHAEOLOGICAL CONSULTANTS, INC.
is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:
March 5, 2010 to March 31, 2011



MBE Administrator



Certification Specialist



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PARKS AND RECREATIONAL FACILITY ENGINEERING

PKS-A. ABILITY OF PROFESSIONAL PERSONNEL

PKS-A.1. Professionals Available for Assignment

This section describes the total number of ECT professionals who may be assigned to the project in this work category, and their availability to provide services on relatively short notice for the small to medium size projects that are contemplated in this contract.

ECT has identified 19 key professionals on the organization chart (see Figure PKSA-1) as the primary individuals to provide services in the parks and recreation facility engineering work category (licenses and registrations are provided in Appendix A). These personnel are listed on the following table to indicate projected/ known commitments for the year 2011, and estimates of their total manhours available for the project. The anticipated availability of these personnel (approximately 9 man-years in 2011 alone) is more than sufficient to complete the tasks anticipated under this contract. If additional man-hours are needed, ECT has adequate backup staff based in its eight Florida offices.

Name	Project Assignment	Committed Percent for 2011	Available Percent for 2011*	Available Manhours
Leland Smith, P.E., D.WRE	Project Manager; Site Civil Engineering, Task Manager—Construction Administration	35	50	1,040
Ronald Potts, P.E., P.G.	Assistant Project Manager	35	50	1,040
Larry Danek, Ph.D.	Project Director	30	55	1,144
Chris Fagerstrom, P.E.	Task Manager— Site Civil Engineering	35	50	1,040
Darren Stowe, AICP	Task Manager—Planning	50	35	728
Richard Hall, P.E. (HPE)**	Task Manager—Transportation Engineering; Planning	40	45	936
Glenn Herbert, FASLA	Task Manager—Landscape Architecture	45	40	832
Lisa Ricker, PWS	Task manager—Wetlands and Ecology	45	40	832
Lealy Norris	Task manager—Field Services	37	48	998
Maria Cruz	Task manager—GIS / CADD	25	60	1,248
Ron Edenfield, P.E.	Site Civil Engineering	35	50	1,040
Steve Danskine, P.E.	Site Civil Engineering	50	35	728
Steve Provost, P.E.	Site Civil Engineering	55	30	624
Doyle Cottrell, P.E.	Construction Administration	45	40	832
David Sanders, E.I.	Construction Administration	35	50	1,040



Name	Project Assignment	Committed Percent for 2011	Available Percent for 2011*	Available Manhours
James Poppleton	Wetlands and Ecology	40	45	936
Maya Scohier, PWS	Wetlands and Ecology	40	45	936
Gary Dalbec	Field services	35	50	1,040
Michael Racca	GIS / CADD	30	55	1,144
TOTAL				18,158

* Based on maximum of 85 percent.
**Hall Planning & Engineering, Inc.

PKS-A.2. Brief Resumes of Key Project Personnel

This section provides brief resumes for key ECT personnel to be assigned to the project under this work category. Note that some personnel are proposed to fill more than one role. An organizational chart for this project is also presented for reference as Figure PKSA-1. Resumes for other ECT personnel shown in the organizational chart are provided in Appendix B. ECT has adequate resources to assign additional personnel if needed to perform work related to the contract. The summary information provided in this section is, however, limited to the key team member assignments identified in the preceding section. Key personnel are the project manager, assistant project manager, project director, and task managers.



PROJECT DIRECTOR

Larry Danek, Ph.D

- Principal-in-charge
- Client satisfaction
- Project quality management
- Alternate point of contact
- Company resources

PROJECT MANAGER

Leland Smith, P.E., D.WRE

ASSISTANT PROJECT MANAGER

Ronald Potts, P.E., P.G.

- Primary point of contact
- Client satisfaction
- Budgets / schedules

- Project team coordination
- Public meetings and presentations

PLANNING

Darren Stowe, AICP*
Richard Hall, P.E. (HPE)
Don Berryhill, P.E. (ABA)

- Land use planning / approvals
- Transportation planning
- Capital project finance mechanisms / strategies
- Public meetings and

LANDSCAPE ARCHITECTURE

Glenn Herbert, FASLA (BHC)*
David Cowles, RLA (CLA)
Melanie Harris, LEED AP (BHC)

- Landscape architecture and schematic design support
- LEED project support
- Arboricultural services
- Public meetings and presentations

SITE CIVIL ENGINEERING

Chris Fagerstrom, P.E.*
Leland Smith, P.E., D.WRE
Ron Edenfield, P.E.
Steven Provost, P.E.
Steve Danskine, P.E.

- Paving, grading and drainage design
- ERP permitting
- Water and sewer utility design and permitting
- Plans and specifications
- Public meeting support

TRANSPORTATION ENGINEERING

Richard Hall, P.E. (HPE)*
Antonio Garcia, P.E. (GBE)
Kim Bottomy, P.E. (KBE)

- Traffic engineering
- Transportation design and permitting
- FDOT access management and connection permitting

FIELD SERVICES

Lealy Norris*
Gary Dalbec

- Sampling and analysis
- Subcontractor supervision
- GPS data collection

GIS / CADD

Maria Cruz*
Michael Racca

- GIS data management and analysis
- Civil 3D engineering CADD support

CONSTRUCTION ADMINISTRATION

Leland Smith, P.E., D.WRE*
Doyle Cottrell, P.E.
David Sanders, E.I.

- Cost estimation
- Bidding services
- Construction monitoring

WETLANDS & ECOLOGY

Lisa Ricker*
James Poppleton
Maya Schoier

- Wetlands delineation / mitigation
- T&E studies / mitigation
- Ecological permitting
- Invasive species management

*Task Manager

SUBCONTRACTORS

Bellomo-Herbert and Company, Inc. (BHC)
Cowles Landscape Architecture (CLA)
Garcia Bridge Engineers, P.A. (GBE)
Trail Dynamics, LLC
Environmental Geotechnical Specialists, Inc.
Thurman Roddenberry & Associates, Inc.

Hall Planning & Engineering, Inc. (HPE)
Angie Brewer and Associates, L.C. (ABA)
KB Engineering, LLC (KBE)
Southeastern Chemtreat, Inc.
Archaeological Consultants, Inc.

FIGURE PKSA-1

**PROJECT ORGANIZATION AND KEY PERSONNEL
PARKS & RECREATIONAL FACILITY ENGINEERING**

Source: ECT, 2011.



Environmental Consulting & Technology, Inc.



**PROJECT MANAGER; SITE CIVIL ENGINEERING; TASK MANAGER—
CONSTRUCTION ADMINISTRATION**

1. **Name and Title:** Leland Smith, P.E., D.WRE, Senior Engineer
2. **Job Assignment for Other Projects:** Work assignments include project manager for multidisciplinary project teams, and engineer of record for civil, environmental and water resources design and construction projects. His project experience includes serving in senior project manager and lead design engineer roles in private sector land development and public sector infrastructure projects.
3. **How Many Years with This Firm:** Employed by ECT for 4 years.
4. **How Many Years with Other Firms:** After graduating with a B.S. degree in 1991 and prior to joining ECT, Mr. Smith was employed for a total of 11 years by other consulting firms, and 5 years by state government environmental agencies.
5. **Experience:** A wide variety of civil engineering and environmental consulting projects from both regulatory and consulting perspectives. His consulting experience includes 15 years of progressively responsible consulting project management assignments leading locally-, regionally-, and globally-distributed multidisciplinary teams. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$1.3 million on a large, multi-year environmental management system implementation project. Specific project involvement is typically as project manager, project engineer and/or engineer of record.
6. **Education:** M.S. in Civil Engineering
B.S. in Civil Engineering
7. **Active Registrations:** Professional Engineer in Florida, Alabama, Georgia, Idaho and Maryland; Florida Department of Environmental Protection (FDEP) Qualified Stormwater Management Inspector.
8. **Other Experience and Qualifications Relevant to this Project:** Mr. Smith is the engineering manager in ECT's Tallahassee office, and can be available if needed to meet with Leon County project staff with as little as 15 minutes notice. He has worked over 18 years of his engineering career in Leon County, and has served as project manager and project engineer in a wide variety of local government projects in north Florida. In the years 2000 to 2002, prior to his recruitment by ECT, he consulted to the County as project manager for engineering services during the construction phase on Phase I of the Lake Munson Restoration Project. Prior to that time, he served as project manager for environmental permitting on the SouthWood planned unit development (PUD) project. More recently, Mr. Smith has consulted extensively to the Northwest Florida Water Management District (NFWFMD) in support of the District's Environmental Resource Permit-



ting program, beginning at the outset of Phase I in 2007, and continuing into Phase II at the present time, serving as primary engineering reviewer for complete engineering reviews of environmental resource permit (ERP) application packages. Mr. Smith has been certified as a Diplomate, Water Resources Engineer (D.WRE) by the American Academy of Water Resources Engineers, and has been designated as a Model Law Engineer by the National Council of Examiners for Engineering and Surveying. From 2002 to 2003, during Mr. Smith's term as President of the Florida Water Environment Association, Big Bend Chapter, he led the effort to organize and present the chapter's first and second annual technical seminars, which have become a model for other chapters within the state to follow, and which continue to be held annually to the present time. Mr. Smith is also active in the American Water Resources Association, Florida Section, and served on the organizing committee for the March 2011 bi-monthly meeting of the state association at Florida's State Capitol building.

Examples of Mr. Smith's relevant project experience include the following:

Project Manager/Engineer of Record; New PUD and Phase I Final Development Plan Design, Monticello Plantations, LLC—Civil engineering planning, design and permitting services for water, sewer, roadways, grading, and stormwater infrastructure in the 115-acre first phase of a new 421-acre single-family detached housing residential PUD in Monticello, Florida, including 133 residential units, common area parks and walking/cycling trails. The design for this curb-and-gutter development includes approximately 3 miles of streets and drainage. Stormwater management facilities designed for this project include six wet detention ponds and one bioretention basin.

Project Manager/Project Engineer; Preliminary Civil Engineering and Planning Services for New Medical Facility, Wentworth Building Corporation—Comprehensive planning-level site development services for the redevelopment of an historic plantation property to construct a new medical facility in Thomas County, Georgia. Services included civil engineering evaluation of existing site civil infrastructure, ecological study, and master planning for redevelopment, including phased transportation, water, wastewater and stormwater infrastructure improvements.

Project Engineer; Dredge Plan for Construction of a Public Boat Ramp Facility for the City of Carrabelle—Civil engineering design services for dredging associated with construction of a new public boat ramp facility located on the historic Carrabelle River waterfront in Carrabelle, Florida.

Project Engineer; ERP Program Support for the NFWFMD—Assisted the District with implementation of its Phase I and Phase II ERP program by providing complete engineering reviews of ERP application packages, including performance of ground-truthing inspections, review of construction plans and speci-



fications, stormwater design calculations and related documentation, and preparation of permits for issuance.

Project Manager, Engineering Services During Construction; Lake Munson Restoration Project, Phase I, for the Leon County Public Works Department—Managed engineering services during construction of this initial phase of the Lake Munson restoration project, which included restoring a filled historical lakebed to create a 25-acre stormwater attenuation and treatment pond, excavating a 35-acre sediment delta from the bottom of Lake Munson, and restoring 2 miles of eroded channel upstream from Lake Munson by establishing a more stable, vegetated/armored channel. The project also included construction of a system of hydraulic control structures (dams, weirs and gates), restoration of a more natural hydroperiod in wetlands adjacent to the project area, and provisions for removal of sediment and trash.

Project Manager; Environmental Permitting Services; SouthWood PUD—Management of all environmental permitting, conservation, and mitigation efforts during several months of site civil engineering design and environmental permitting activities for a new PUD on over 3,000 acres of undeveloped land in Tallahassee, Florida. Responsibilities included coordination of natural features inventories/environmental impact analyses, environmental permitting, and protected species habitat mitigation.

Project Civil Engineer/Project Manager; Lagoon System Expansion Feasibility Study and Conceptual Design, St. Andrew Bay LLC—Led a multidisciplinary project team in a study of engineering and permitting feasibility, including bathymetry, hydrographic analysis, development of an environmental monitoring plan, recommendations for holistic management practices addressing the entire lagoon system to produce an overall system-wide improvement in water quality, and preparation of a development concept in pre-permitting phase for a proposed expansion of an existing lagoon connected to the St Andrew Bay estuary system in Bay County, Florida. Included preliminary engineering feasibility evaluation of small boat transport alternatives including lock, rail tram, and hydraulic lift systems.

Project Manager/Project Engineer; Casa Bianca Ridge Phase II Conservation Subdivision Design for Casa Bianca Land Trust—Preliminary civil engineering design and permitting consulting for roadway, grading, and stormwater infrastructure in a proposed new 125-acre single-family detached housing residential conservation subdivision that includes open space parks, walking/cycling trails, and interconnected wildlife corridors. The project location is in Jefferson County just west of Monticello, Florida.

Project Manager/Project Engineer; Engineering Feasibility Study for a New Rural Residential Subdivision, Gator Investments LLC—Engineering feasibility analysis services including assessment of physical site conditions, planning



and regulatory controls, potential hindrances to development, opportunities to enhance project value, conceptual land development planning and analysis of three alternative development scenarios for a potential new residential subdivision with conservation set-asides on over 2,500 acres of undeveloped rural property in eastern Jefferson County, Florida.

Project Manager/Project Engineer; Telecommunications Tower Siting Feasibility Study, Calvary Chapel Tallahassee—Evaluated a rural site in Madison County, Florida, for potential placement of a telecommunications tower, including site investigation, conceptual site design and pre-application coordination with permitting authorities.

ASSISTANT PROJECT MANAGER

1. **Name and Title:** Ronald Potts, P.E., P.G., Senior Engineer
2. **Job Assignment for Other Projects:** Work assignments include design engineer for parks and recreational facilities, geologic review and assistance on assessments.
3. **How Many Years with This Firm:** Mr. Potts has worked full time for ECT for the past 6 years. Prior to that time, he worked for ECT on a part-time basis for over 4 years.
4. **How Many Years with Other Firms:** Mr. Potts has worked for 24 years in the Tallahassee area, mostly with other consulting firms, but also for about 7 years with NFWFMD.
5. **Experience:** Experience in a variety of projects as well as project and line management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$100,000 on large contamination assessment and remedial design projects. Specific project involvement was primarily as the lead geologist or engineer and/or project manager.
6. **Education:** B.A. in Physical Sciences—Geology/Physics
M.S. in Geological Engineering
7. **Active Registrations:** Professional Engineer in Florida, Alabama, Arkansas, Colorado, and Georgia. Professional Geologist in Florida.
8. **Other Experience and Qualifications Relevant to this Project:** As the assistant project manager, Mr. Potts will assist the project manager as needed with administrative and project team coordination activities, routine project administrative matters, and maintenance of an effective interface with subcontractors.



Examples of Mr. Potts' relevant project experience include the following:

Project Manager; Continuing Civil Engineering and Environmental Consulting Services, Leon County—Multi-year contract for providing general environmental services to the County on an as-needed basis. Responsible for overall execution of contract, obtaining task assignments and client satisfaction as well as managing projects and providing professional guidance for staff engineers and geologists. Project includes Phase I/II environmental site assessments (ESAs), contamination assessments, remedial action planning and design, construction oversight for underground storage tank (UST) sites, stormwater engineering, hazardous waste projects, air permitting, wetlands delineation, ecological studies and other environmental support services as requested.

Project Manager; Continuing Civil Engineering and Environmental Consulting Services, City of Tallahassee—Multi-year contract for providing general environmental and stormwater design and review services to the City of Tallahassee on an as-needed basis. Responsible for managing project and providing professional guidance for staff engineers and geologists. Project services include Phase I/II ESAs, contamination assessments, remedial action planning and design, construction oversight for UST sites, stormwater engineering, hazardous waste projects, air permitting, wetlands delineation, ecological studies and other environmental support services.

Project Manager; Continuing Services Agreement for Contractual Services, NFWFMD—Multi-year contract for providing professional, technical and field assistance for newly authorized ERP program for the NFWFMD. Responsible for client satisfaction and coordinating personnel needs with the NFWFMD, including placement of ECT personnel either part time, as needed, or full-time in NFWFMD offices. Performed ongoing permit application reviews.

Project Permitting Engineer; NFWFMD—Project engineer for multiple small design and construction projects such as boardwalks, walkways and erosion control measures at several small parks owned by the district.

Project Manager; Phase I ESAs, NFWFMD—Two-year contract for providing Phase I ESAs on an as-needed basis. Most assessments were for large acreage rural tracts being purchased by the water management district. Performed and oversaw the completion of four separate assessment projects ranging in size from a few dozen acres to over 1,500 acres.

Project Design Engineer; Coca-Cola Distribution Facility, FDEP—Designed and provided oversight of construction, start-up and operation and maintenance of a medium-sized remediation system for soil and groundwater cleanup at a Coca-Cola distribution facility in Okaloosa County, Florida. Remedial technology con-



sisted of *in-situ* air sparging and vacuum extraction using 14 sparging points and five vertical soil vacuum wells. Multi-year operation of system was required.

Project Manager and Engineer; Leon County—Design of aboveground storage tank (AST) system for the Leon County Library and the Leon County Sheriff's Department. Projects consisted of removal of existing USTs and replacement with ASTs at both locations. Sheriff's Department required design of three 10,000-gallon, bullet proof ASTs, with dispensers and lighted canopy.

Senior Hydroengineer; Division of Resource Regulation, NFWFMD—Reviewed and commented on engineering and hydrologic design for permit applications to construct/repair earth dams and ponds. Field inspected existing dams applying for repair and dam sites applying for new construction.

Senior Hydrologist; Division of Resource Management, NFWFMD—Engineering design and planning tasks for various projects relating to stormwater, surface water quality, groundwater, water supply planning, and other similar areas of study. Prepared and managed Phase I ESAs, boat ramp and erosion control designs on District lands, and other engineering projects for Lands Division.

PROJECT DIRECTOR/PRINCIPAL-IN-CHARGE

1. **Name and Title:** Larry Danek, Ph.D., President and Principal Scientist
2. **Job Assignment for Other Projects:** Project director and project manager in a wide variety of multidisciplinary projects, and principal investigator for research projects.
3. **How Many Years with This Firm:** Dr. Danek has worked for ECT for 23 years.
4. **How Many Years with Other Firms:** Prior to ECT, Dr. Danek worked for other consulting firms for an additional 16 years.
5. **Experience:** Experience in a variety of projects as well as project and line management is included in the resume attached to this submittal. Projects have ranged in size (dollar value) from as little as a few hundred dollars for small professional opinion projects, to over \$20,000,000 for a large brownfield contamination assessment, remediation and site redevelopment project. Specific project involvement has typically been as project manager, project director and/or principal investigator.
6. **Education:** Ph.D. in Physical Sciences
M.S. in Physical Sciences
B.S. Geological Oceanography



7. **Active Registration:** Not applicable.
8. **Other Experience and Qualifications Relevant to this Project:** As the president of ECT, Dr. Danek will commit the necessary ECT resources to ensure the project manager has sufficient resources and experienced personnel to complete all work under this contract on time and within budget.

Examples of Dr. Danek's relevant project experience include the following:

Project Director; Environmental Consulting Services, Leon County—Assisting project manager and staff in all areas necessary to ensure quality environmental consulting services are provided to the client's satisfaction.

Project Manager; East Gainesville Depot Park Brownfields Redevelopment Program, Gainesville Regional Utilities/City of Gainesville—Responsible for management and administration of a project to remediate coal tar and other hazardous contaminants from a brownfield site near downtown Gainesville and redevelop the site as a regional stormwater park. A regional stormwater treatment basin has been designed to provide treatment for 89 acres of downtown Gainesville. A multiple best management practice (BMP) approach was taken, including the use of pretreatment units and wetland polishing along with the use of a wet detention basin containing various native plant species to remove contaminants including sediment and nutrients prior to discharge to Sweetwater Branch. Responsibilities also include coordination between multiple agencies in the remediation clean-up, site development, and permitting phases of the project. The site is currently undergoing remediation, with funding assistance from FDEP.

Facilitator; Lower St. Johns River Technical Advisory Committee (TAC)—As a subcontractor, served as a facilitator for 3 years for the TAC, which included organizing and leading planning meetings for addressing concerns and preparing an action plan for the St. Johns River. Duties also included prioritizing and ranking special projects for funding through direct legislative appropriation.

Project Director; Dog Branch-Edgefield Regional Stormwater Treatment System, St. Johns River Water Management District (SJRWMD)—Participated in the management and design of a planting plan for a 56-acre stormwater treatment facility. The system was designed to utilize plants to remove phosphorus, nitrogen, and sediment from agricultural pollution sources and polish the stormwater prior to release into the St. Johns River near Palatka.

Project Technical Director; Wayne County Rouge River National Wet Weather Demonstration Program, Assessment of Toxic Contaminants and Restoration of Newburgh Lake—Provided technical oversight for a team of aquatic biologists and chemists investigating the occurrence and distribution of toxic metals and organic compounds. Emphasis is placed on contaminants identified in Great Lakes Initiative (GLI) guidance document as bioaccumulative chemicals of



concerns (especially mercury and PCBs). The sampling program, implemented in 1996, focused on establishing the occurrence, impact, and potential sources of toxics in water, sediment, and fish throughout the watershed. After initial studies were completed, restoration plans were prepared in 2000; remediation of the lake included removal of sediments contaminated with PCBs and metals. The lake bottom was recontoured and native wetland species were planted to remove contaminants.

Project Manager; Rodman Reservoir Restoration Environmental Assessment, SJRWMD—Conducted three separate projects to help assess the potential environmental impacts of restoring the 6,000-acre Rodman Reservoir in Putnam and Marion Counties, Florida, to its original riverine conditions. These studies included: (1) bathymetric and sediment thickness survey to determine the reservoir volume and sediment volume within the reservoir; (2) water quality and sediment quality surveys to determine the past, the present, and predict the future sediment and water quality conditions under various restoration scenarios; and (3) forest restoration modeling using FORFLO to predict the revegetation of the reservoir under 256 different scenarios of restoration, planting, and hydrologic conditions.

TASK MANAGER—PLANNING

1. **Name and Title:** Darren Stowe, AICP
2. **Job Assignment for Other Projects:** Mr. Stowe, a certified planner, has served as a project manager, land manager, and planner for related projects throughout the state. He has provided services for several municipalities (comprehensive plan amendments, etc.), state agencies, The Trust for Public Land, the electric power generating industry, and the phosphate mining industry, among others.
3. **How Many Years with This Firm:** Mr. Stowe has worked for ECT for 15 years.
4. **How Many Years with Other Firms:** Prior to ECT, Mr. Stowe worked for 16 years with other companies.
5. **Experience:** Mr. Stowe's past experience includes land management, developments of regional impact (DRIs), comprehensive plan amendments, environmental impact statements, and general planning activities including zoning changes.
6. **Education:** B.S. in Biology.
7. **Active Registration:** Licensed Environmental Professional, American Institute of Certified Planners.
8. **Other Experience and Qualifications Relevant to this Project:**



Examples of Mr. Stowe's relevant project experience include the following:

Project Planner; Environmental Site Assessment, Southern Company Services—Project planner and land use expert for a proposed integrated gas combined cycle electrical power plant; a surface lignite coal mine; and linear facilities including a natural gas pipeline, transmission lines, and a pipeline for sequestered carbon dioxide in Kemper County, Mississippi. Responsible for preparation of the land use, socioeconomics, environmental justice, housing, and transportation sections of the Department of Energy's environmental impact statement.

Project Manager; Comprehensive Plan, City of Ocala—Responsible for reviewing City of Ocala's land use designations and zoning to update the comprehensive plan. The primary focus of the update was to review and incorporate policies related to protecting groundwater from contamination by hazardous wastes, identifying and protecting wetland areas, identifying and protecting threatened and endangered species and habitats, and the identification and delineation of karst-sensitive areas. The findings of the project were presented at a public hearing.

Project Planner; Phosphate Mining Land Use Approvals, Mosaic Fertilizer, L.L.C.—Reviewed applicable comprehensive plans and land development regulations for Hillsborough, Manatee, and Hardee Counties, Florida. Prepared land use documents and presented expert witness testimony in quasi-judicial proceedings.

Expert Witness; Land Use Planning, Multiple Clients—Presented expert witness testimony in support of mining ordinances in Lee and Citrus Counties and in support of phosphate mining projects in Hillsborough, Manatee, and Hardee Counties, Florida. Testimony included compliance with comprehensive plans (state, regional, and local) and consistency with local ordinances and land use codes.

Project Planner; Phase I ESA, Sargent & Lundy—Due diligence investigations of an approximately 3,200-acre property in Taylor County, Florida, proposed for development by the Florida Municipal Power Authority as a solid fuel power plant. Prepared a comprehensive plan text amendment and amendment to the Future Land Use Map. Provided oversight of subcontractors for roadway/railroad alternatives and archaeological/historical resource surveys. Prepared land use and socioeconomic portions of SCA.

Project Planner; Polk Power Station Unit 6, TEC—Prepared supporting documentation for a level 4 conditional use permit and the appropriate land use and socioeconomic sections of the SCA in support of a proposed 660-MW integrated coal gasification combined cycle (IGCC) electrical power generating plant in Polk County, Florida. The application also included new transmission lines requiring land use review.



Project Planner; Transmission Line Siting Act-Miami-Dade County, Florida Power & Light Company (FP&L)—Project planner and land use expert for approximately 140-miles of 500-kV and/or 230-kV transmission line through eight different municipalities. Assisted in route selection and public outreach. Prepared appropriate sections of Chapter 9 of the site certification application (SCA) for development of two new nuclear electrical generating units.

Project Planner, Smith Unit 3 SCA, Gulf Power—Completed the land use and socioeconomic background study and impact analysis sections of the application for siting a 550-MW natural gas fired electrical generating plant in Bay County, Florida. Prepared documentation to support an amendment to the Future Land Use map of Bay County from an Agricultural to an Industrial designation.

Project Manager and Principal Planner, Land Management Plan, Hillsborough County—Prepared a land management plan to incorporate planned county facilities, including a regional wastewater treatment plant, a sludge treatment facility, a regional park with recreational facilities, a potential high school site, roadway infrastructure and wetlands restoration. Successfully obtained a conditional use permit for the proposed facilities in Hillsborough County, Florida.

Project Manager; Phase I/II ESAs, The Trust for Public Land—Performed Phase I ESAs of many large-acre, undeveloped tracts for public acquisition for The Trust for Public Land throughout Florida. Conducted a Phase I ESA of a 3,800-acre tract in Pasco County. Subsurface investigations were conducted on two onsite landfill areas. Performed Phase I/II ESAs for proposed rails-to-trails projects in Leesburg, Sarasota County, and St. Petersburg, Florida.

Project Manager and Senior Scientist; Phase I, II, and III ESAs and Underground Storage Tank (UST) Management Services, The Trust for Public Land—Performed Phase I and Phase II ESAs for the Marineland facility to facilitate sale to three separate entities including Flagler County, the University of Florida, and a private developer. Removed USTs and contaminated soils at two separate locations.

TASK MANAGER—LANDSCAPE ARCHITECTURE

1. **Name and Title: Glenn Herbert, FASLA**
2. **Job Assignment for Other Projects:** Mr. Herbert has completed over 3,000 projects that have become landmark examples of design excellence, and his efforts have been rewarded with more than 25 local, state and national design awards. His expertise is his vast knowledge of native and ornamental plant materials, his in-depth knowledge of construction and his unique understanding of the maintenance implication of his designs.



3. **How Many Years with This Firm:** Mr. Herbert has been with Bellomo-Herbert since its inception in 1990, a total of 21 years.
4. **How Many Years with Other Firms:** Mr. Herbert's professional career prior to joining Bellomo-Herbert includes 24 years with other firms.
5. **Experience:** Mr. Herbert's experience is extensive, he has designed hundreds of projects for governmental agencies throughout the state, including land management, park and recreation master plans; regional, neighborhood and resource based parks and greenways; sports complexes; boat ramps and fishing piers, gateways and beautification projects; pedestrian/bicycle and way-finding studies; and landscape enhancements for medians, roadways and special features.

Mr. Herbert is one of the longest practicing landscape architects in Florida opening his first office in 1967 and maintaining an office in Orlando ever since. He was responsible for many of Orlando's landmark projects like Lake Eola Park, Loch Haven Park, and many of the Downtown Streetscape projects.

As Vice-President, Mr. Herbert is routinely involved in all of the firm's projects through his various roles as principal in charge, project manager or lead designer. Projects have ranged from \$100,000 garden design to over \$53 million Regional Park project. His project management skills on parks, urban design and streetscape projects are unequalled.

6. **Education:** B.S. in Landscape Architecture.
7. **Active Registration:** Licensed Landscape Architect, Florida.
8. **Other Experience and Qualifications Relevant to this Project:**

Mr. Herbert is a Fellow of the American Society of Landscape Architects, has had five projects honored in White House ceremonies for Excellence in the Field of Environmental Design, received the University of Florida's "Distinguished Alumnus" award for Outstanding Contributions to Public Service and the Profession of Landscape Architecture, and was recognized by the Florida State Board of Landscape Architects for Outstanding Services Rendered to the Profession and the State.

Mr. Herbert and his professional staff at Bellomo-Herbert have teamed successfully with ECT in prior project engagements, and have thus established a good working relationship with the ECT team.

Examples of Mr. Herbert's relevant project experience include the following:

Principal-in-Charge and Lead Designer; 27th Avenue Park, New Smyrna Beach—Bellomo-Herbert was contracted to renovate this existing beachfront



park that offered disorganized parking and deteriorating facilities. The renovated design included the creation of a paved promenade along the beach, with trellis structures for shade, covered picnic pavilions, a family restroom/changing room, a pirate themed children's playground and structured parking and substantial landscape improvements.

Lead Designer; Birthplace of Speed Park, Ormond Beach—the Birthplace of Speed Park was built to commemorate the 1903 automobile race held on the beach. At the request of the City, Mr. Herbert worked with McKim & Creed, Engineers to develop the design for the renovation of the park that included multiple levels, refurbishing the existing pavilion, new walkways, display areas for antique cars and monuments, and a wooden deck on top of the County's restroom building.

Principal in Charge and Lead Designer; Central Park, Ormond Beach—Bellomo-Herbert designed a master plan for this 150+ acre site that provides a natural oasis in the heart of an urban area that serves thousands of residents. Developed in three separate phases over two decades, the final 85 acre piece will complete the park and create a unique opportunity for residents and visitors to the area. Existing facilities already provide a limited amount of recreation, and meetings with the City's staff, advisory boards and the public reinforced the desire to maximize the unique resources this site has to offer.

Principal-in-Charge and Lead Designer; Frank Rendon Park, Daytona Beach Shores—Located on the Atlantic Ocean, this park was created by reclaiming an unimproved beach parking lot and a narrow city park that had 50 feet of beach frontage. The two parcels were combined and the park frontage along the beach was increased from 50' to 284'. The park amenities included a restroom, designed with a Florida vernacular theme that was carried throughout the park in the custom designed pavilions, playground and central promenade to the beach and beach parking.

Landscape Design; Gemini Springs Park, Volusia County—Mr. Herbert provided landscape design for this 210-acre passive park developed around two magnitude three springs on the DeBary Bayou, adjacent to the St. Johns River. Leading a team of architects, environmental consultants and engineers, Bellomo-Herbert designed and developed a swimming area in the natural spring reservoir, a fishing pier, canoe launch, swim dock, children's wading area, camping areas, picnic areas, playgrounds, group camp, equestrian trails, parking areas, lighting, landscaping, irrigation and a 3/4 mile long interpretive nature walk featuring educational signs.

Principal-in-Charge and Lead Designer; Indian Trails Sports Complex, City of Palm Coast—Indian Trails Sports Complex is a \$3.2 million regional sports complex that included four full-size soccer fields, two Little League baseball fields, one full size baseball field, one softball field, a small playground area, and



associated bleacher areas, picnic pavilions, Concession Building, parking and access. Bellomo-Herbert also successfully applied for a \$400,000 FRDAP grant for the construction of the park. The firm is currently designing a new Maintenance Facility, additional Concession Stand and a youth sports headquarters building.

Lead Designer; Jackie Robinson Ballpark, Daytona Beach—Mr. Herbert was the lead designer for this historic renovation to the ballpark where Jackie Robinson broke the color barrier playing his first major league game. Bellomo-Herbert was contracted to provide design/build services for a \$750,000 renovation that had to be completed in four months so that the City wouldn't lose a \$400,000 grant. The project was designed, permitted and built in four months and the Cubs played their season opener at the newly renovated ballpark. The new ballpark also contained a museum element that featured interactive exhibits of some of the other basketball, track and field records that Robinson held, as well as other sports "barrier breakers".

Project Manager and Lead Designer; Little Manatee River State Recreation Area, Hillsborough County—for this 2,433-acre resource-based park for Florida's Department of Natural Resources. The Little Manatee Rives had been designated an Outstanding Florida Water which required extensive environmental analysis. A thorough site investigation preceded the master planning effort to assure the preservation of natural features and minimize the developmental impact to the site. The project included full construction documents for 2.5 miles of roadway, parking areas, restrooms, picnic facilities and a boat launch. Amenities include a 6.5 mile hiking trail, 12 miles of hiking and equestrian trails, 4 equestrian campsites, a full-facility campground, a primitive campsite, a youth group campground and project signage.

Principal-in-Charge; Longs Landing Management Plan, Palm Coast—Bellomo-Herbert was contracted to prepare a management plan for the Longs Landing Estuary. The project will provide an opportunity to fill a gap in the greenway between neighborhoods that border the Long Creek and Big Mulberry Branch Creek natural corridors. The proposed improvements will include the 1,200 s.f. Nature Center, restroom facilities, roadways and parking, bicycle trails, nature trails, canoe/kayak launch, picnic pavilions, nature overlooks with educational kiosks and signage, and an elevated fishing pier.

Principal-in-Charge; Marine Science Center, Ponce Inlet—One of the most unusual, yet highly rewarding projects ever undertaken by the firm. Bellomo-Herbert and Company served as the prime consultant for the design of a 5,400 s.f. Environmental Learning Center located at Lighthouse Point Park. Bellomo-Herbert also assisted in architectural programming and co-designed the center's exhibits which described the ecosystem of the island from salt marsh to beach. Services included overall project design, architectural concept and programming



assistance, managing the consultants, handling the permitting, working with the exhibit design consultants, and supervising all construction.

Principal-in-Charge and Project Designer; New Smyrna Beach Sports Complex; New Smyrna Beach—\$8.5 million, 75-acre complex. Project includes football stadium, track, 4 soccer fields, 4 little league fields, 4 softball fields, multipurpose fields, the City's maintenance compound, concession stands, various support facilities, parking, and all infrastructure.

Landscape Architect; North Collier Regional Park, Naples—\$3 million 213-acre regional park. As the prime consultant Bellomo-Herbert managed a team of 12 subconsultants that included engineers, architects, environmentalists, agronomists, etc. Bellomo-Herbert was responsible for overall design and permitting of the project which included \$15 million of architectural facilities; a \$7 million water park; a 5-field, tournament level softball complex; 8 tournament level soccer fields; and all roadways, parking, nature trails and various support facilities.

Principal-in-Charge; North Shore Park, Ormond-by-the-Sea—North Shore Park opened in June 2010 as part of the county's continuing effort to provide beachfront recreation and off-beach parking. The Park provides paved parking spaces, bicycle racks, restrooms and showers, and two dune walkovers, including an ADA accessible ramp for beachgoers. Funding was provided by the Ponce DeLeon Inlet and Port District; Volusia County's ECHO program, the Land and Water Conservation Fund, and Daytona Beach Racing and Recreational Facilities District. Bellomo-Herbert was the prime consultant responsible for all master planning and design services as well as construction management.

Principal in Charge; Palm Coast Linear Park; Palm Coast—Mr. Herbert was responsible for the design of a linear park that encompasses 56 acres in the heart of residential areas of Palm Coast. The project provides a trailhead, a canoe rental concession and launch, paved bicycle trails, soft hiking trails and footbridges for residents and visitors to experience, and trail connections to other facilities throughout the City.

Principal-in-Charge and Project Designer; Payne Park (Phase I), Sarasota—for this 40 acre signature park located in downtown Sarasota. Bellomo-Herbert was the prime consultant and services included all master planning, an extensive community involvement process, design and construction documents, and bidding and construction phase services. Features included a "Great Lawn"; a ½ mile, tree-shaded, soft-surface, jogging/walking promenade; a skate park; office, maintenance and restroom buildings; a café; an entrance feature (with fountain); a community center; an Adventure Playground (with carousel); a 12 court tennis complex; a 20 court shuffleboard complex; croquet and lawn bowling courts; a ¾ acre Boat Pond; and roadways, parking and all infrastructure. We imported 250,000 C.Y. of fill to create 12' of grade change across the site.



Principal-in-Charge; Rockefeller Park, Ormond Beach—Bellomo-Herbert and Company, Inc. was the prime consultant for the off beach parking facility in Ormond-by-the-Sea. Services included design, permitting, construction documents, and construction administration. Facilities included arch gateway, landscape & irrigation and off-beach parking lot.

Principal-in-Charge and Lead Designer; Stetson Soccer Park, DeLand—Mr. Hebert and the Bellomo-Herbert team worked closely with the Athletic Department and the Sr. Assistant for Special Projects to develop the University's soccer complex. The project included the design of tournament and practice fields, parking, spectator areas, fencing; scoreboards field lighting, dugouts and a filming tower. The master plan of the complex provides for a future restroom/concession building and a locker room/training facility for the teams.

Project Manager & Lead Designer; Turkey Lake Park, Orlando—300-acre nature/recreation facility. As the prime consultant managing a team of 6 sub-consultants Bellomo-Herbert's services included all master planning, design and construction documents, bidding and construction administration. The project included an entrance station, roadways, a small marina, fishing docks, bathhouses, nature study center, restrooms, picnic shelters, hiking trails (including ADA accessible trail) camping areas and a "Cracker" style animal farm. In 2002 the firm was retained to provide renovations and upgrades to the park which included a new guardhouse, a playground, a wayfinding system, a new group picnic shelter and other miscellaneous amenities.

Principal-in-Charge; Parks and Recreation Master Plan / Woodlea Park Master Plan, Tavares—Development of the Parks Master Plan for the City of Tavares which inventoried 14 park sites representing more than 300 acres in the City's inventory of parks. Extensive public involvement, meetings with key stakeholders, users/resident surveys and extensive demographic research were used to plan for the City's recreation needs 25 years into the future. A detailed analysis of each of the park sites identified opportunities for expansion or improvements that would accommodate user needs well into the future. These recommendations, representing nearly \$20 million worth of improvements also included design plans for some of the sites, including a 40-acre sports complex.

Principal-in-Charge and Lead Designer; Tom Renick Park, Ormond-by-the-Sea—Located on the ocean, this park was dedicated to Tom Renick who spent 30 years in the service of the Volusia County Beach Patrol. The park's amenities include a family restroom/changing room designed in the Florida architectural vernacular, custom designed pavilions, a children's playground and a central promenade that led to the beach.

Project Manager and Lead Designer; Turkey Lake Park, Orlando, Florida—300-acre nature/recreation facility. As the prime consultant managing a team of six subconsultants our services included all master planning, design and construc-



tion documents, bidding and construction administration. The project included an entrance station, roadways, a small marina, fishing docks, bathhouses, nature study center, restrooms, picnic shelters, hiking trails (including ADA accessible trail) camping areas and a “Cracker” style animal farm.

Principal in Charge and Lead Designer; The Casements, Ormond Beach— Bellomo-Herbert was contracted to develop a master plan for the renovation of this historic John D. Rockefeller winter home. Mr. Herbert worked closely with Kenneth Smith, preservation architect, to develop concepts that would begin to restore this historic home and grounds to its former grandeur. Concepts included development of a Grand Lawn and Promenade adjacent to the river with a plaza/stage area for performances; a streetscape treatment for Riverside Drive; new walkways and a terrace at the front of the house; and renovated parking to accommodate special events.

Principal-in-Charge and Lead Designer; Sunsplash Park, Daytona Beach— This park received the 2003 Award of Honor from the American Society of Landscape Architects. This was Volusia County’s first initiative at building off-beach parking that also included park features. The project included a Florida vernacular family restroom, picnic pavilions, an interactive splash pad, a shaded children’s playground, a school of fish wind sculpture, a “cool zone” designed for Coca Cola, handicapped beach access, parking for 150 cars and landscape improvements.

Project Manager & Lead Designer; Valencia Community College (West Campus), Orange County, Florida—One of the premier institutions within the state’s college system that serves Orange and Osceola counties. The consultant worked on this 180-acre campus on the west side of Orlando for nearly 10 years, being responsible for overall master planning, site planning of individual buildings, the design of all of the courtyards (including hardscape design and detailing of water features) roadway and median design, all of the landscape design, irrigation, lighting, and signage/wayfinding. Services included the production of all contract documents, bidding, and construction observation. The project won a National Landscape Award presented in a White House Ceremony. Mr. Herbert was also an adjunct professor teaching landscape design courses at the college for 3 years.

TASK MANAGER—SITE CIVIL ENGINEERING

1. **Name and Title: Chris Fagerstrom, P.E., Senior Engineer**
2. **Job Assignment for Other Projects:** Mr. Fagerstrom has served as project manager and civil engineer for parks and recreation facilities-related projects throughout the state. He has provided services for many municipalities and county agencies for the design and construction of recreational facilities in addition to designing stormwater basins to be used at recreational areas.



3. **How Many Years with This Firm:** Mr. Fagerstrom has worked for ECT for 12 years.
4. **How Many Years with Other Firms:** 1 year.
5. **Experience:** Mr. Fagerstrom's past experience includes parks and recreational engineering, water resource modeling, stormwater sampling and data collection, design and engineering of stormwater parks, providing engineering evaluations, and designing stormwater systems to prevent or alleviate flooding. Mr. Fagerstrom has also provided construction oversight of his designs. He has also been involved in securing grant money and loans for his governmental agency clients to complete stormwater projects.
6. **Education:** B.S. in Environmental Engineering
7. **Active Registrations:** Professional Engineer in Florida; FDEP Qualified Stormwater Management Inspector.
8. **Other Experience and Qualifications Relevant to this Project:** Mr. Fagerstrom's 12 years of experience in civil engineering makes him highly qualified to provide the requested services for Leon County. He has provided similar services for Alachua, Volusia, and Seminole Counties and various municipalities (Gainesville, Titusville, New Smyrna Beach, Daytona Beach, Port Orange, Orlando, etc.) during his career at ECT. Mr. Fagerstrom's projects have ranged in size from a few thousand dollars to over half a million (consulting fees—not including construction).

Examples of Mr. Fagerstrom's relevant project experience include the following:

Task Engineer; Regional Stormwater Park Design, City of Gainesville— Currently conducting stormwater design for a proposed regional stormwater park located on a contaminated brownfield site in Gainesville, Florida. The stormwater park is being designed to treat the stormwater runoff from 89 acres of downtown Gainesville using a multiple BMP approach. Other project tasks include Florida Department of Environmental Protection permitting, construction drawing and specification preparation, subconsultant coordination, construction oversight, and multiple agency coordination. Visual-SWMM model is being used to simulate the stormwater runoff from the drainage basin and associated storm sewer.

Project Manager; Tributary "E" Stormwater Park, Volusia County— Conducted design and construction administration service for a 15-acre stormwater park in southeast Volusia County, Florida. The offline treatment system will serve a 1,100-acre watershed. The site design includes grading and drainage plans, precast restroom building, asphalt parking, irrigation and pond aeration, 3,300+ feet of walking trail. Other tasks completed for this project include wa-



tershed modeling using SWMM, wetland restoration, and stormwater pollution prevention plan preparation.

Project Engineer; Plymouth Avenue Soccer Park, Bellomo Herbert—Conducted stormwater design and permitting for a county soccer park to be located on a closed landfill site near DeLand, Florida. Project tasks included stormwater modeling using ICPR and multiple agency permitting.

Project Manager; Sunsplash Park Beach Safety Lifeguard Headquarters, Schweizer, Waldroff—Conducted paving, grading, and drainage design for a county-owned building located in Daytona Beach, Florida. Other project tasks included City of Daytona Beach, FDOT (driveway and drainage connection), and SJRWMD permitting, cost estimating, preparation of construction plans and specification, and ICPR modeling.

Project Engineer; Egret Marsh Stormwater Park, Indian River County—Conducted multiple agency permitting of an innovative stormwater treatment system in Indian River County, Florida. The treatment train consists of drawing stormwater runoff from the surrounding canal system into an initial settling pond then from that point water is pumped up to a Algal Turf Scrubber (ATS™) system in which algae uptake nutrients and is harvested periodically. The stormwater is then discharged to a polishing pond and then to a wetland habitat area then back to the canal system.

Project Engineer; North Causeway Marina Expansion, North Causeway Marine—Prepared site plan and stormwater management plans for the expansion of an existing marina in New Smyrna Beach, Florida. Project tasks include completion of sediment sampling, stormwater management report, ICPR and Ponds modeling, and environmental resource permit (ERP).

Project Engineer; Beachside Fire Station, Schweizer & Waldorf Architects and Associates—Prepared site plan and stormwater management plans for the proposed Beachside Fire Station in New Smyrna Beach. Project tasks included site plan layout, construction drawings, stormwater management report, ICPR and Ponds modeling Florida Department of Transportation permitting, and environmental resource permitting.

Project Manager; Strickland Shooting Range Site Engineering, Bellomo-Herbert, and Co.—Completed paving, grading, and drainage design for a county-owned shooting range located in Daytona Beach, Florida. Other project tasks included City of Daytona Beach and SJRWMD permitting, cost estimating, preparation of construction plans and specification, and ICPR modeling.

Project Engineer; Christian Life Center, Christian Life Center—Conducting paving, grading, and drainage design for a proposed church located in New Smyrna Beach Florida. Other project tasks included Volusia County, and SJRWMD



permitting, cost estimating, preparation of construction plans and specification, and ICPR modeling.

TASK MANAGER—TRANSPORTATION ENGINEERING; PLANNING

1. **Name and Title:** **Richard Hall, P.E., President, Hall Planning and Engineering**
2. **Job Assignment for Other Projects:** Since becoming a consultant in 1980, Mr. Hall has worked on a variety of projects including urban transportation plans, DRIs, hurricane evacuation planning, level of service analysis, scenic highway planning and transportation/land use interrelationships. Mr. Hall assisted in the planning of Seaside by performing the DRI traffic element and other parking and traffic analysis. Since then he has participated in over 75 traditional neighborhood design (TND) charrettes with Dover Kohl & Partners, DPZ and other leading firms performing new urbanism designs. He is a Knight Community Building Fellow in the initial class of this University of Miami-based program. This fellowship produced research in street design for walkable communities with new street classifications serving pedestrian oriented neighborhoods.
3. **How Many Years with This Firm:** Mr. Hall has been employed by HPE for 15 years.
4. **How Many Years with Other Firms:** Previous to his tenure at HPE, Mr. Hall was employed for 25 years by other firms.
5. **Experience:** Mr. Hall is licensed to practice traffic engineering in 15 states and has experience at all levels of transportation engineering, from State DOT (Florida) to regional MPO and site design work through consulting experience. Rick's specialty is the design of walkable streets and communities. His company, HPE, is recognized for expertise in engineering low-speed environments where pedestrians and automobiles interact with each other. Mr. Hall's work on TND generally includes parks, streets, and trails as transportation focus areas. His projects typically range in dollar value from \$3,000 to \$100,000, frequently within the context of multi-million dollar projects where HPE is part of a large project team.
6. **Education:** M.S., Civil Engineering
B.S., Civil Engineering
7. **Active Registrations:** Professional Engineer, Florida (civil and structural), Alabama, Arkansas, Georgia, Illinois, Mississippi, New Mexico, Ohio, Pennsylvania, Virginia, Texas, Maryland, North Carolina and South Carolina.
8. **Other Experience and Qualifications Relevant to this Project:** Mr. Hall is a practicing, licensed transportation engineer dealing with planning, design and



regulatory issues in the transportation field. After earning his Bachelor's and Master's degrees in Civil Engineering at Virginia Tech, he worked for the Florida Department of Transportation (FDOT) for 8 years. He first served as FDOT's representative to the Miami Urban Area Transportation Study technical committees. Mr. Hall later worked as the Regional Planning Engineer for the urban studies in the Tampa Bay Region and finally was responsible for training and research in urban transportation modeling. His research work initiated the FDOT urban travel modeling process in wide use today. Mr. Hall is a member of the Congress for the New Urbanism (CNU) and is part of a team initiating a CNU Street Design Manual. He has served as a visiting professor at Florida State University's Department of Urban and Regional Planning where he taught land use and transportation courses and has also served as President of the Florida Section, Institute of Transportation Engineers.

Mr. Hall and his planning staff at HPE have worked with ECT's project manager in prior project engagements, and therefore have an established working relationship with the ECT team.

The following is a brief list and description of Mr. Hall's project work that specifically involved planning for trails, paths, and low-speed park-oriented streets.

Conceptual Design Engineer, Hartwood Marsh, FL—This TND community included a large natural area/park and a walkable downtown core. HPE provided walkable thoroughfare sections to support walking and bicycling connectivity through the park and downtown areas.

Conceptual Design Engineer, Centennial Hill, Montgomery AL—This project included an Olmstead-designed neighborhood park in need of revitalization. Rick provided transportation plans and analysis to determine the most appropriate way to address the historically-significant park streets.

Conceptual Design Engineer, Gulfport, MS, Comprehensive Plan Transportation Element—The post-Katrina Gulfport, MS Comprehensive Plan included a new focus on bicycle and pedestrian transportation and trails networks. HPE provided trail designs, transportation planning, and analysis to support this element of the Comprehensive Plan.

Conceptual Design Engineer, Ka'u District Plan, Hawaii—The largest and most-rural district on the Big Island of Hawaii, Ka'u is the island's playground. Development pressures stirred the creation of the first District Plan for the area. HPE provided transportation analysis, including walkable urban thoroughfares, trail routing and planning, and trail design.

Conceptual Design Engineer, Albuquerque NM, Montano Blvd—This highway project in New Mexico included a well-used trail system with at-grade cross-



ings of a four lane highway. HPE designed trail crossings to slow vehicles to safe speeds at the at grade locations.

Conceptual Design Engineer, Juniper Point, Flagstaff, AZ—This TND community in Arizona included a preserved natural wash through the center of the site. HPE provided trail planning and bicycle planning to support the walkable design of the community. HPE also provided thoroughfare designs to ensure motor vehicle traffic interacts safely with trail users at crossing locations.

TASK MANAGER—WETLANDS AND ECOLOGY SERVICES

1. **Name and Title:** Lisa Ricker, PWS, Staff Scientist
2. **Job Assignment for Other Projects:** Ms. Ricker is a senior ecologist and project manager with ECT. She has extensive experience conducting ecological surveys and assessments including wetland delineations, wetland functional assessments using the Uniform Mitigation Assessment Method (UMAM), plant and wildlife threatened and endangered species surveys, vegetation and land-use mapping, and vegetation and wildlife inventories. In addition, Ms. Ricker is highly experienced in preparing ERP applications, including conducting alternatives analyses, finding creative methods for eliminating and reducing impacts, preparing mitigation plans, and coordinating with federal and state regulatory agencies to secure permits. Ms. Ricker is also experienced in providing environmental monitoring during construction to ensure projects are built according to plan and within permit conditions. She has additionally testified as an expert witness in ecological issues for several complex permitting projects.
3. **How Many Years with This Firm:** Ms. Ricker has been with ECT for 8 years.
4. **How Many Years with Other Firms:** Ms. Ricker has been employed by other firms for a total of 7 years.
5. **Experience:** Ms. Ricker's has served as project manager and project scientist on many ecology and wetlands delineation/permitting projects. Her projects have ranged in size from a few thousand dollars to several million dollars.
6. **Education:** M.S., Biology
B.S., Zoology
7. **Active Registration:** Professional Wetland Scientist; Maryland Qualified Environmental Professional.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Ms. Ricker will be responsible for coordination of permitting and overall



quality management for all ecology services provided by the ECT team under this contract.

Examples of Ms. Ricker's relevant project experience include the following:

Project Manager; SeaCoast Natural Gas Pipeline Project; EMS Land and Environmental Services—Performed wetland delineations, threatened and endangered species surveys, and natural resource inventories for a 50-mile long natural gas pipeline. Prepared USACE and ERP applications for impacts associated with the pipeline project, including crossing the St. Johns River. Prepared alternatives analysis and supporting documentation for crossing state conservation lands.

Ecological Task Manager; Keystone Jacksonville Terminal, Southern Monitoring & Environmental, LLC—Performed wetland delineations, threatened and endangered species survey, and wildlife assessments. Assisted in preparation of impact analysis in support of ERP/USACE permit application preparation for Port dredge project in Jacksonville, Florida. Scope will include acquisition of sovereign submerged lands easement.

Ecological Task Manager; CSX Terminal; Constellation Energy—Assisted in preparation of a Maryland Department of the Environment and USACE permit applications for 50+ foot depth dredge project in Port of Baltimore, Maryland. Scope included baseline and impact assessment for ecological impacts and alternatives analysis.

Assistant Project Manager; Elk City Wind Energy Facility; NextEra Energy Resources. LLC—Performed a critical issues analysis for a +90,000-acre wind resource area in western Oklahoma. Critical issues evaluated included threatened and endangered bird species, native potential bird and bat fatalities from collision with tall structures, loss or fragmentation of habitat, wetland impacts, visual impacts, impacts to cultural resources, and land use/zoning issues.

Ecologist; Mosaic Ona Mine Permitting Project; Mosaic Fertilizer, L.L.C.—Performed wetland functional assessment, using UMAM for 17,000+ acres of land proposed for surface phosphate mining in the Hardee County, Florida. The assessments entailed qualitatively and quantitatively characterizing location and landscape support, water environment, and community structure of each wetland in reference to high quality wetlands of the same type. The project required significant internal and agency coordination to ensure consistency among ecologists and reviewers.



TASK MANAGER—FIELD SERVICES

1. **Name and Title:** Lealy S. Norris
2. **Job Assignment for Other Projects:** Mr. Norris has worked as a project manager, task manager, project scientist, and crew chief on a variety of projects where ecological and field services have been required.
3. **How Many Years with This Firm:** Mr. Norris has been with ECT for 6 years.
4. **How Many Years with Other Firms:** Mr. Norris has been employed by other firms for a total of 22 years.
5. **Experience:** Mr. Norris' project experience includes field sampling activities, equipment operation and maintenance, ESAs, wetland delineations, protected species surveys, GPS mapping, aquatic plant removal, and science diver.
6. **Education:** High school diploma.
7. **Active Registration:** Advanced SCUBA; Florida certified burner, No. 02957; FDEP wetlands delineation; FDEP advanced hydric soils; FDEP stormwater management inspector certification.
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Mr. Norris will be responsible for all field services required for tasks assigned under this project.

Examples of Mr. Norris' relevant project experience include the following:

Project Manager; Florida Wildlife Exotic Plant Survey, Florida Fish and Wildlife Commission—Conducted field surveys of two wildlife management areas in Taylor County, Florida, to identify and map exotic plant occurrences.

Task Manager; Invasive/Exotic Plant Survey, Leon County—Conducted field survey on 215 acres. Prepared results report along with technical specification on management of species documented during survey.

Task Manager; Field Services for Taylor Energy Center Project Power Plant and Transmission Siting for Florida Municipal Power Authority, Sargent & Lundy—Responsible for field sampling of soil and water. Also assisted in wetlands evaluation and ecological studies for a proposed power plant site in Taylor County, Florida.

Assistant Project Manager; Tillie Miller Park, City of Carrabelle—Worked closely with City officials and public in the design and renovation to local



recreation park. Coordinated with engineers and contractors on all areas related to construction. Prepared bid packages.

Project Scientist; Environmental Services, Leon County—Conducted ecology, wetlands, and other environmental tasks.

Crew Chief; Wetlands Delineation and Mapping—Supervised crews conducting wetlands delineation and mapping on many Florida panhandles sites.

Crew Chief; State, County, and Local Survey Firms—Team leader on boundaries, topographic, tree, and plant identification work.

Project Manager; Wetlands Management, SGI Land Company, LLC—Worked with client to negotiate with the City of Carrabelle on best management of wetlands located on property proposed for future urban housing project. Worked with client's engineering firm to develop native landscaping plan for subject property. Liaison between City and client in permitting issues.

Assistant Project Manager; Carrabelle Wharf, City of Carrabelle—Attend all public and government meetings to help in the design of a new riverfront recreation area of the City of Carrabelle, Florida. Conduct and coordinate all field sampling. Prepare necessary permit applications and bid packages. Provide construction oversight, as needed.

Project Scientist; Environmental Services, City of Tallahassee—Conducted wetland delineations, Phase I/II environmental site assessments, water quality monitoring, and other environmental tasks.

Assistant Project Manager; Field Studies, City of Carrabelle—Design and construction of a city park and marina. Project included surveying, public meetings, water and sediment sampling, and a tidal current study.

Park Ranger; FDEP—Park guide on Wakulla River for over 6 years. Led many guided hike and boat tours in and along the Wakulla River. Lead ranger on many resource management projects to include prescribed fire and exotic plant removal.

TASK MANAGER—GIS/CADD

1. **Name and Title:** Maria Cruz
2. **Job Assignment for Other Projects:** Work assignments have included GIS specialist, web mapping developer, database developer, computer programmer, and manager of the GIS/CAD department.
3. **How Many Years with This Firm:** Ms. Cruz has been with ECT for 12 years.



4. **How Many Years with Other Firms:** Ms. Cruz has been employed by other firms for a total of 13 years.
5. **Experience:** Ms. Cruz's project experience includes GPS/GIS inventory and management, and 15 years of web and database design and development. She is experienced in developing GIS databases to analyze and perform tasks, such as: raster analysis, phase I site studies, thematic mapping (such as land use, soils, zoning, etc), parcel mapping, wetlands mapping, and land use planning, among others. Ms. Cruz has also developed multiple web mapping applications for the company, incorporating the new Google Map technology, providing the client with the user experience of a Google map.
6. **Education:** B.S., Business Administration/CIS
7. **Active Registration:** MCP NT 4.0 certification, No. 2073467; Security+™ Certified Professional
8. **Other Experience and Qualifications Relevant to this Project:** As task manager, Ms. Cruz will be responsible for coordination and overall quality management for all GIS and CADD services provided by ECT and its subcontractors

Examples of Ms. Cruz's relevant project experience include the following:

Web Mapping Developer; Website Development, SWFWMD—Developed a web-based demo site for SWFWMD (www.ectmapping.com) to display watershed and floodplain data. The application displays imagery, roadways, FEMA, and parcel information for Pasco County. The application provides a search function to locate and display parcel information by first and/or last name. The website can be accessed and viewed by the general public.

GIS Specialist; Kemper Lignite Mine and Transmission lines, Southern Company Services, Inc.—Managed and prepared various GIS and CAD maps for multiple corridors for Mississippi Power's proposed gas transmission pipeline and electrical transmission lines in Kemper, Lauderdale, Jasper, and Clarke Counties, Mississippi. Generated data set to determine and analyze impacted and non-impacted wetlands, upland forests, land use, construction impacts, and length of collocated facilities.

GIS Specialist; SeaCoast Natural Gas Transmission Pipeline, TECO Peoples Gas—Prepared various GIS maps for multiple corridors for TECO Peoples Gas proposed gas transmission pipeline in Clay, Duval, and St. Johns Counties, Florida. Generated data sets, from GPS data, and used for analysis of the following: impact on wetlands, parcel proximity, collocated facilities, and structure counts.



Web Mapping Developer; Florida Power & Light Company (FPL)—Developed a web mapping application, with embedded Google maps, to locate and display distance measurements from a specified address (or click on the map) to the routes proposed for over 100 miles of new transmission lines denoted on the map. The software used was Google Maps API, JavaScript and HTML/CSS. This web site was developed specifically for FPL for their Turkey Point Nuclear Project and is publicly accessible. (www.ectincmap.com/FLviewerT.html).

GIS Specialist; Florida Municipal Power Authority, Sargent and Lundy—Created several general location and operational maps for site analysis. Collected data and prepared land/vegetation, wetlands and potential construction impacts maps.

GIS Specialist; St. Johns Pellicer-Pringle 230-kV Transmission Corridor, FPL—Prepared maps, integrated data from several sources, and manipulated photographic and satellite imagery with ArcGIS 9.x, AutoCAD Map, and Raster Design. Collected data and prepared maps for land/vegetation, construction impacts, wetlands and other geographic features. Performed spatial proximity analysis to score best suitable corridor based upon proximity of specific features. Prepared series of maps for licensing applications, and map boards for public hearings.

GIS Specialist; Site Analysis and Licensing for Taylor Energy Center, Sargent & Lundy—Delineated over 900 acres of wetlands from GPS points collected from the field, and integrated with other GIS data. Collected, calculated and mapped data for land/vegetation, construction impacts, wetlands and other geographic features.

Web Mapping Developer; Confidential Client—Deployed web-based GIS mapping application for ECT marketing team, with the potential of identifying and tracking potential projects and efforts in Florida. Duties entailed developing the web application to serve and display graphic and database attribute information for ECT authorized staff. Web mapping software used is UNM's Mapserver. Programming languages include HTML/CSS, CGI, Javascript and PHP. Current efforts entail re-writing the web application with PHP, under Mapserver/Mapscript for advanced mapping functionality.

Access/VBA Database Programmer—Developed a linear corridor assessment model in PC-based MS Access/VBA (called Segment Manager and Analyzer [SMA]) for in-house evaluation of large numbers of route alternatives for power clients. This proprietary program identifies all route permutations, calculates all route total scores for the criteria evaluated, allows for weighting of the criteria, and ranks the routes based on weighted criteria.

GIS Specialist; Site Study, Edison Mission Energy—Assembled numerous GIS maps to identify initial potential sites based on regional reviews across the state of Illinois (preliminary transmission flow modeling, review of sequestration poten-



tial, and review of operating and proposed mines); then narrowed the field down for further detailed evaluation.

GIS Specialist; Numerous Clients—Collected data, such as 2004 digital ortho quarter quads, USGS quad maps, National Wetland Inventory, Florida Geographic Data Library, and GPS survey information to generate cartographic maps. Converted AutoCAD data to GIS format for analytical use. Generated thematic maps and general location maps for use in proposals, presentations, public hearings, etc.

GIS/AutoCAD Specialist; Kelson Ridge Power Plant, Reliant Energy—Prepared aerial maps and other documentation for land use, wetlands, soils, floodplains, and other areas necessary for the certificate of public convenience and necessity studies associated with the proposed 1,650-MW facility located in Charles County, Maryland. Worked with state and county agencies to obtain land use and environmental data.



PKS-A.3. Outside Consultants Anticipated to be Used on this Project

ECT anticipates a potential need for subconsultants on this project and has identified the following companies to provide services:

Landscape architecture, certified arborist services, display graphics

Bellomo-Herbert and Company, Inc.
833 Highland Avenue, Suite 201
Orlando, FL 32803



Cowles Landscape Architecture
2285 Trescott Drive
Tallahassee, FL 32308



Trail Planning, Design and Construction

Trail Dynamics, LLC
P.O. Box 664
Cedar Mountain, North Carolina 28718



Structural engineering

Garcia Bridge Engineers, P.A. (MBE)
1018 Thomasville Road Suite 105A
Tallahassee, FL 32303



Roadway design and FDOT right-of-way permitting

KB Engineering, LLC (WBE)
207 W. Park Ave Suite A
Tallahassee, FL 32301



Facility planning and capital project finance consulting

Angie Brewer & Associates, L.C. (WBE)
2285 Trescott Drive
Tallahassee, FL 32308



Surveying

Thurman Roddenberry & Associates, Inc.
125 Sheldon Street
Sopchoppy, Florida 32358



Geotechnical investigations, testing and consulting

Environmental & Geotechnical Specialists, Inc. (WBE)
3154 Eliza Road
Tallahassee, Florida 32308



Archaeology support

Archaeological Consultants, Inc. (WBE)
98 Hickory Wood Drive
Crawfordville, FL 32327



Vegetation Management

Southeastern Chemtreat, Inc.
5650 NW 135th Street
Chiefland, FL 32626



Transportation Planning and Design

Hall Planning & Engineering, Inc.
322 Beard Street
Tallahassee, FL 32303



Several of the above firms are either MBE or WBE certified by Leon County, the City of Tallahassee, or the State of Florida (see Appendix C). Although there is no aspirational MBE/WBE target prescribed by Leon County for this project, ECT acknowledges that each respondent is strongly encouraged to secure MBE and WBE participation through the purchase of those goods or services when opportunities are available.

Additional or alternate outside consultant firms may be used for this project, subject to approval by Leon County.



PKS-B. EXPERIENCE WITH PROJECTS OF A SIMILAR TYPE AND SIZE

PKS-B.1. Projects Illustrating Experience of Firm and Staff

In this section, ECT presents ten projects, completed within the past 5 years, which illustrate relevant experience of the firm and current staff which are to be assigned to the project.

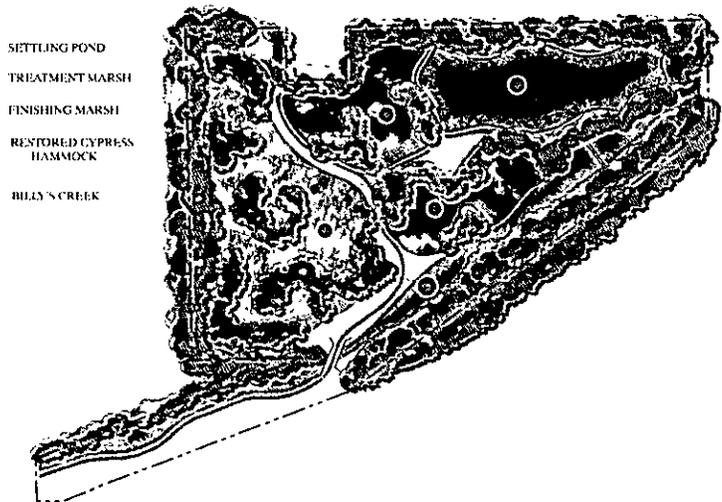
PROJECT NO. 1—BILLY CREEK FILTER MARSH PARK

HIGHLIGHTS:

- | | |
|---|--|
| ■ <i>Stormwater management</i> | ■ <i>Bids and specifications</i> |
| ■ <i>Design engineering</i> | ■ <i>Construction management</i> |
| ■ <i>Wetlands delineation/remediation</i> | ■ <i>Construction drawings</i> |
| ■ <i>Park amenities</i> | ■ <i>Reduction of nutrient loading</i> |
| ■ <i>Water quality monitoring</i> | ■ <i>Reduction of solids loading</i> |

The Billy Creek Watershed, approximately 12 square miles in size, is located within the northcentral portions of the City of Fort Myers’ corporate limits. In the past, many deep, narrow earthen channels and subsurface drainage piping systems were installed in the watershed to remove stormwater as efficiently as possible. Stormwater pollutants inherent with local land use activities were also transported and discharged, without any attenuation, absorption, or assimilation, into the natural systems of Lower Charlotte Harbor.

ECT was contracted to provide engineering design, construction management, monitoring, wetland delineation, wildlife surveys, wetland planting designs, and other consulting services for the Billy Creek Filter Marsh Park. The project, a 56-acre water quality improvement facility, includes cycling and pedestrian trails adjacent to the Billy Creek canal. The filter marsh system consists of a control weir structure which diverts flows from the channelized portion of Billy Creek, one 6-acre lake, two 4-acre filter marshes, and restoration of an existing 12-acre cypress hammock. The system was designed to flow through the lake, thence into the filter marshes and cypress hammock, and return to Billy Creek under normal seasonal flow conditions. In addition, the filter marsh park is wholly contained within the 100-year floodplain and increases the over bank storage volume, as well as, include a pathway, which will meander through the filter marsh park for recreational (pedestrian and cycling access) and environmental education purposes.





The lake provides for removal of the suspended solids and sediments. The wetland marshes provide for the removal of nutrients including nitrogen and phosphorus, and also heavy metals. An annual or bi-annual maintenance activity removed the accumulated pollutants from the facilities and a monitoring program measured the specific level of success of the facilities in polishing/improving water quality. This project was consistent with goals and objectives of that identified as "Priority Waterbodies" for the Lower Charlotte Harbor by the South Florida Water Management District and the City of Fort Myers stormwater management plan.

ADDITIONAL INFORMATION:

LOCATION:	Fort Myers, Florida
CLIENT:	City of Fort Myers
ADDRESS:	Public Works Department 2200 Second Street Fort Myers, Florida 32901 Saeed Kazemi, P.E., Public Works Director, 239 • 321-7216
CONTRACT PERIOD:	March 2006—March 2009
CONTRACT AMOUNT:	Engineering design: \$100,000 Construction Oversight: 52,196 Construction: \$1,750,000 Land acquisition: \$2,000,000

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ Ronald M. Edenfield, P.E.—Project Manager



PROJECT NO. 2—TEN-MILE CANAL FILTER MARSH AND LINEAR PARK PROJECT

HIGHLIGHTS:

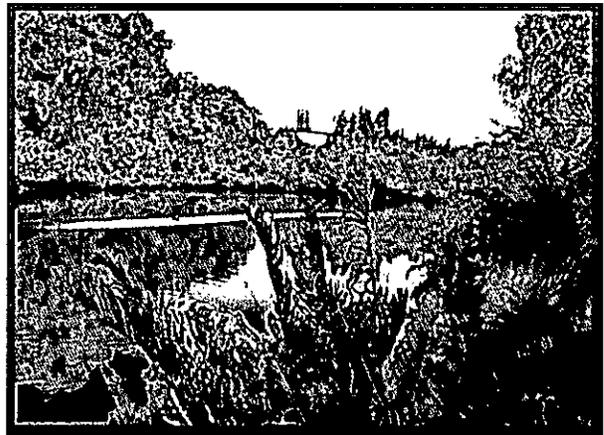
- Multi-function facility
- Wetland water quality treatment design
- Water quality monitoring and assessment
- Filter marsh planning and design
- Community recreational facility
- Neighborhood connectivity
- NPDES compliance credits
- Federal and state permitting



The Ten Mile Canal is located in central Lee County, Florida running from the City of Fort Myers corporate limits at the northern end to Mullock Creek and ultimately Estero Bay Aquatic Preserve to the south. Constructed in the 1920s as an interceptor canal for the now defunct Iona Drainage District, the canal has become a primary drainage conveyance for a 68- square- mile watershed with multiple tributaries. Since its construction, the population of the surrounding area has grown, as have the canal's discharges and subsequent pollutant loads. Given the canal's relative position in the landscape and its constituent drainage area being primarily of pre-regulatory developments comprised of intensely

developed industrial, commercial, and urban areas, it is currently suspected of being a primary contributor to the high pollutant levels in both Estero Bay and its tributary, Mullock Creek. Local initiatives led to the formation of the Water Enhancement & Restoration Coalition (WERC) which promoted the implementation of the project. Ultimately the project was funded by the Lee County Board of County Commissioners and the South Florida Water Management District by way of stormwater restoration grant funding. ECT was contracted to design, permit, manage construction, and evaluate the effectiveness of the combined filter marsh and linear park facility.

Construction of the filter marsh system was completed in late 2005 becoming operational in January 2006. Elements of the Linear Park which extends from Ben C. Pratt/Six Mile Cypress Parkway at the south to Colonial Boulevard at the north, provides approximately 4.75 miles of pedestrian-bicycle pathway meandering along landscaped portions of the Ten Mile Canal right-of-way.



ECT provided evaluation services by monitoring the inflow and out-flow water quality and quantity to ensure the finished marsh met the projected pollutant loading reduction goals. ECT also collected hydraulic and hydrologic data to determine the performance and effectiveness of the filter marsh system, and



worked with the county to collect and evaluate water quality data. The monitoring process provided ECT with the information necessary to adaptively manage the monitoring and maintenance plan and ensure the project's success.

ADDITIONAL INFORMATION:

LOCATION:	<i>Ten Mile Canal in Lee County, Florida</i>
CLIENT:	<i>Lee County Board of County Commissioners and Sub to David M. Jones & Associates (linear park)</i>
ADDRESS:	<i>1500 Monroe Street Fort Myers, Florida 32901</i>
CONTRACT PERIOD:	<i>Roland Ottolini, P.E., 239 • 479-8131 November 2001 through October 2008</i>
CONTRACT AMOUNT:	<i>\$407,609</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Ronald M. Edenfield, P.E.—Project Manager</i>
■ <i>James E. Poppleton—Ecologist</i>



PROJECT NO. 3—GAINESVILLE DEPOT PARK ENGINEERING CONSULTING SERVICES

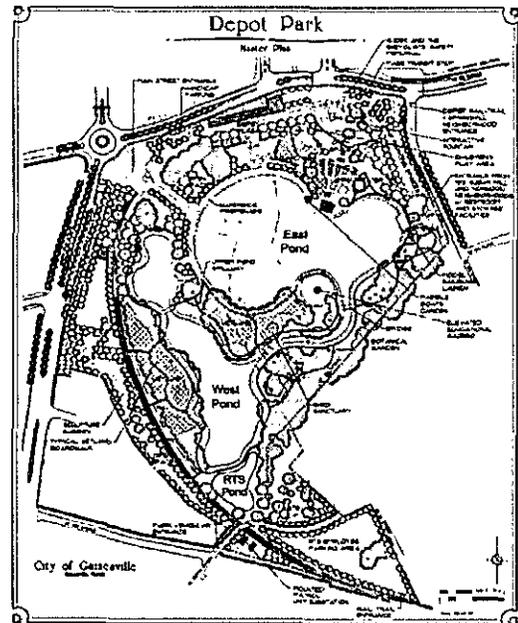
HIGHLIGHTS:

- Phase I environmental site assessment
- Planning and permitting
- Special environmental studies
- Attend meetings representing the city
- Contaminated soil/sediment assessment
- Stormwater design engineering
- Park design and construction
- Remedial action plan
- Wetlands delineation and mitigation
- Threatened/endangered and listed species surveys
- Coordinate with environmental agencies for the city
- Remediation of contaminated soil and sediment

The City of Gainesville was awarded a Regional Brownfield Pilot project grant in 1996 by EPA, Region 4. The brownfield site, located in the vicinity of Depot Avenue in downtown Gainesville, consisted of a 32-acre tract of land with several landowners and several former sources of contamination (gas stations, cement plant, other industrial operations, petroleum tank farms, manufactured gas plant [MGP], and potentially others). The primary contamination source at the site was coal tar residues from the former MGP. ECT was awarded a contract to characterize the complex site, identify the various sources of contamination and extent of soil and groundwater contamination, and prepare a remedial action plan (RAP) to remediate the site. In addition, the city wanted ponds designed for the site to capture and treat stormwater from an 89-acre area in downtown Gainesville. When all remediation is completed, the city also plans to convert the area into a park site with landscaping, cycling, walking, and jogging trails; a museum in the old train depot building; and other amenities. Due to the complexity of the site, including the funding sources, ECT has completed many tasks at the site since 1996. These tasks include the following.

Under Task 1, ECT completed a Phase I ESA of the site in addition to completing all of the required studies necessary for obtaining an environmental resource permit. These studies included wetland delineations, rare and threatened species surveys, tree surveys, archaeology surveys, etc. \$48,281

Under Task 2, ECT installed monitoring wells, collected soil and water samples, and completed contamination assessments and risk assessments to determine the extent of contamination and define soil cleanup target levels (SCTLs) for this very complex site. Task 2 was completed in 2005 at a cost of \$942,276.



Artist's concept of park after remediation and restoration



Under Task 3, an engineering feasibility study and an alternatives analysis were completed and submitted. ECT presented reports of all of the work items during several public hearings and meetings with various stakeholders. Task 3 was completed for a cost of \$236,984.

Under Task 4, a preliminary RAP was prepared and submitted. The remedial action was selected by the city, Alachua County environmental agency, and the FDEP, with participation by ECT. The total cost for Task 4 was \$134,343.

RAPs were also prepared for separate phases of the project. Under Task 5, the cost to complete was \$254,838.

Under Task 6, remediation, the first phase consisted of excavation and remediation of soils and contaminated groundwater associated with the Akira Wood site. Coal tar impacted soils (1,914 tons) were removed and transported to an approved landfill. Contaminated groundwater (188,000 gallons) was disposed of in the city's wastewater treatment plant (WWTP). During the next phase, 4,856 tons of petroleum-contaminated soils and 100,000 gallons of groundwater were removed and treated. The groundwater treatment system consisted of sand beds followed by activated carbon. During the next phase, excavation of the westernmost stormwater basin, a total of 5,700 tons of soil contaminated with petroleum and coal tar residues were transported and disposed of at an approved landfill. Over 9 million gallons of contaminated groundwater was treated onsite by sand filtration and activated carbon prior to disposal in the city's WWTP. Task 6 work was completed in 2006 for \$511,902.

Under Task 7, the RAP for the next phase was submitted to the State for approval. This plan called for the excavation of petroleum- and coal tar-contaminated soils followed by onsite thermal treatment. It was estimated that 170,000 tons of soil would need to be treated. Contaminated groundwater at the site was proposed to again be treated by sand filtration and activated carbon system. A National Pollutant Discharge Elimination System permit was prepared and obtained for discharging a portion of the treated effluent to Sweetwater Branch and subsequently to Paynes Prairie. Additional effluent was planned to be discharged to the City's WWTP. It was estimated that 30 to 40 million gallons of contaminated groundwater would require treatment. \$809,252

ECT subsequently initiated a pilot scale test to evaluate the effectiveness of the thermal treatment system. The pilot testing failed due to the extremely high BTU content of the contaminated soil. The treatment method proposed in the RFP was modified to include excavation and hauling to an approved landfill.

ECT is currently completing remediation at the Poole Roofing area and to the south of Depot Avenue. The area being remediated has been excavated to a depth of 40 feet. The remediation area is dewatered through 106 wells surrounding the area at a pumping rate of 300 gallons per minute (>432,000 gallons per day). An additional dewatering pump has also been installed to remove excess seepage from a sump constructed in the main excavation area. Water recovered from the dewatering system is processed through sand filters and activated carbon prior to discharge to Sweetwater Branch. Contaminated soils removed from the site are transported to an approved landfill for disposal. The cost of this phase, including additional remediation and lake construction to be completed south of the current site, exceeds \$17,000,000.



All work has been completed in compliance with the ECT site-specific health and safety plan and the State QA/QC guidelines. ECT also provided final engineering designs for the Depot Avenue reconstruction and construction oversight during the final remediation and restoration phases. The ultimate goal for the site is remediation, restoration, and conversion into a park that will treat stormwater and also provide a recreation hub to help revitalize the city's east side.

Water Resources

As an integral part of the site restoration, ECT is in the process of designing a regional stormwater park. ECT engineers performed a thorough inventory of downtown Gainesville to determine potential offsite areas for inclusion in the regional treatment system. Upon completion of the inventory ECT engineers developed a basin plan and model using EPA SWMM. The results of this plan demonstrated that the park would have the capacity to treat runoff from approximately 89 acres of downtown Gainesville, with runoff from 47 acres flowing to the park through the storm sewer system and runoff from the remaining 42 acres re-routed from the adjacent Sweetwater Branch Creek. The park itself will consist of a treatment train approach. The first step in the treatment train will be pretreatment provide by a 10- by 16-foot second generation baffle box. The second step in the treatment train process will be performed by two wet detention ponds in series. These wetland ponds are connected by a braided wetland stream that will provide additional water quality treatment. These ponds will be lined to prevent potential groundwater contamination from entering the ponds. Lastly, the water will flow through a preserved onsite wetland for the final step in the treatment train. \$294,362

ADDITIONAL INFORMATION:

LOCATION:	Gainesville, Florida
CLIENT:	City of Gainesville
ADDRESS:	P.O. Box 490, MS 58 Gainesville, FL 32602-0490 Mr. Stewart E. Pearson, P.E., 352 • 334-5072 Mr. John Veilleux, P.E., 352 • 393-8418
CONTRACT PERIOD:	January 2000 to Ongoing
CONTRACT AMOUNT:	\$20,000,000

- ECT PERSONNEL ASSIGNED TO THE PROJECT:**
- **Larry J. Danek, Ph.D.—Project Manager**
 - **Chris R. Fagerstrom, P.E.—Stormwater Engineer**
 - **James E. Poppleton—Ecological assessment**
 - **Gary P. Dalbec—Field Studies**



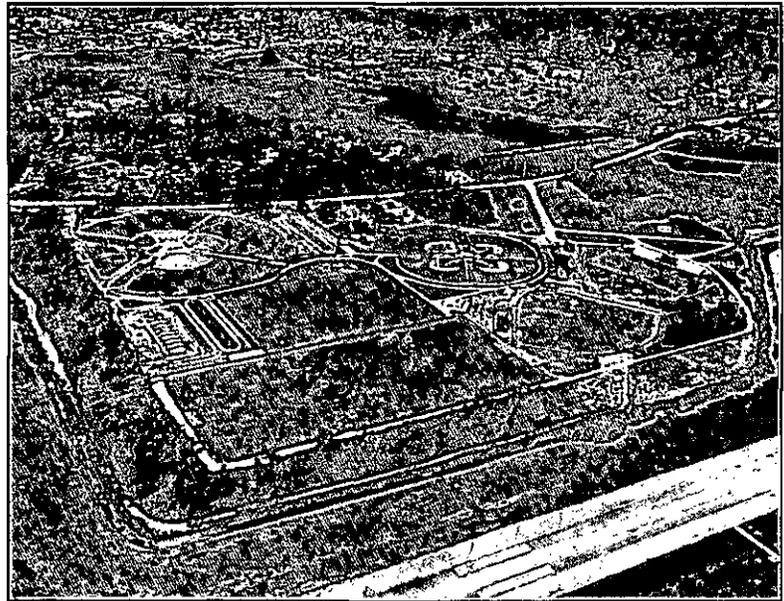
PROJECT NO. 4—SPORTS COMPLEX FOR CITY OF NEW SMYRNA BEACH

HIGHLIGHTS:

- Construction over an existing landfill
- Phased construction program
- Onsite sewage collections system and lift station
- Lightning detection warning system
- PA system for all fields
- Complex-wide stormwater collection system
- Stormwater and utility permitting
- Construction cost estimating
- Construction plans and specifications
- Construction observation
- New 4,200-seat municipal stadium

ECT has been involved for several years with the upgrading and expansion of the New Smyrna Beach Sports Complex, which encompasses 75 acres along the west side of the City's Municipal Airport. The 4-phase project began in 1998 and current tasks were completed in early 2007. Throughout the project, ECT served as the manager of the design team, which included a landscape architect, an architect, and an electrical engineer.

The initial phase of the project was the replacement of two small baseball fields with a single, larger high school regulation-size field. ECT was responsible for the site grading and drainage design, related permitting, and coordination of the sports field lighting.



The area for the 27-acre second phase addition to the existing 50-acre facility was formerly used by the Community for the disposal of construction debris. The first task of this phase was to clear the very heavy vegetation and remove an extensive amount of construction material, which was at or close to the surface. Phase 2 included three soccer fields, three softball fields, a multi-purpose field, two concession buildings, a maintenance building for the City's Parks and Recreation Department, along with additional parking and access roads. Design activities by ECT included interior roadways, parking areas, stormwater management facilities, and utilities.

The third phase, completed in the summer of 2004, included replacement of the 30-year-old football stadium with a 4,200-seat facility constructed around a 400-meter equal quadrant track. Support facilities in this phase included concession, restroom, and locker buildings on the Home Side and Visitor Side. Elevator access was provided to the three-room press box above the Home Side Stadium. To provide for parking, a local street was relocated. As part of this phase, the irrigation system supply for the entire sports complex was changed to an onsite stormwater pond that is supplemented, as needed, with reuse water. ECT was responsible for site engineering and coordination during construction.



The final phase completed in early 2007 included the complete reconstruction of the 4-field youth baseball area. This phase included new sportsfield lighting, a sound system and a central pavilion with an open lower level and an enclosed area for the scorekeepers on the second level. ECT again served as the manager of the design team and was responsible for the layout of all facilities (fields, fencing, dugouts, central pavilion, sidewalks), site engineering and coordination during construction.

ADDITIONAL INFORMATION:

LOCATION:	<i>New Smyrna Beach, Florida</i>
CLIENT:	<i>City of New Smyrna Beach</i>
ADDRESS:	<i>210 Sams Avenue New Smyrna Beach, FL 32168 Khalid Resheidat, P.E., 386 • 424-2209</i>
CONTRACT PERIOD:	<i>January 1999 to June 2007</i>
CONTRACT AMOUNT:	<i>\$7,200,000 (construction) \$420,000 (design)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:
■ <i>Steven C. Provost, P.E.—Project Manager</i>

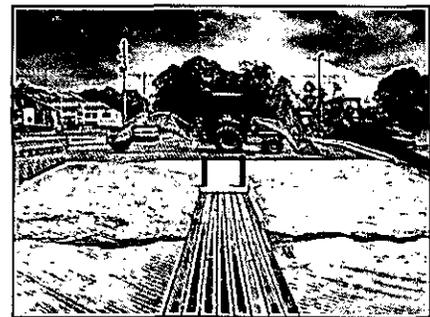


PROJECT NO. 5—MARINE STREET WATERFRONT IMPROVEMENTS FOR THE CITY OF CARRABELLE

HIGHLIGHTS:

- Engineering design
- Environmental permitting
- Environmental sampling and testing
- Architectural control implementation
- Construction phase services
- Planning
- Public meetings
- Bid plans and specifications
- Grant applications

ECT assisted the City of Carrabelle with phased improvements to its working waterfront along Marine Street. The first phase included the design and construction of a boat ramp, staging dock and riverfront boardwalk, with provisions for traffic circulation, stormwater management and a fish cleaning station.

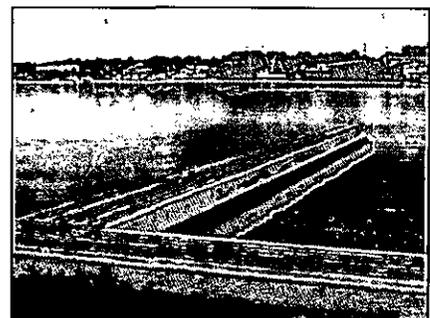


The second phase included design and construction of a children’s fishing pier with ADA-compliant access.



ECT assisted the City with grant coordination and construction of additional park amenities as small amounts of grant money became available, including dolphin sculptures, park benches and interactive art in the form of “climbable” loggerhead turtle sculptures for children.

For these projects, ECT has provided design and permitting services, public meeting support, grant application assistance, and environmental services ranging from environmental studies to seagrass planting. All structures utilized in these designed with an “old Florida seaport” look and feel to retain the old city history and charm.





ADDITIONAL INFORMATION:

LOCATION: Carrabelle, Florida
CLIENT: City of Carrabelle
ADDRESS: 1001 Gray Avenue
Carrabelle, Florida 32322
Courtney Dempsey, City Administrator, 850 • 697-2727
PROJECT NUMBER: Numerous
CONTRACT PERIOD: 2006—Ongoing
CONTRACT AMOUNT: \$2,500,000 (construction)
\$200,000 to date (ECT costs)

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- Lee S. Norris—Project Manager/Environmental Scientist
- Ivan B. Chou, P.E.—Coastal Engineer
- Leland A. Smith, P.E., D.WRE—Civil Engineer for Dredge Plan
- Ron R. Potts, P.G., P.E.—Engineer



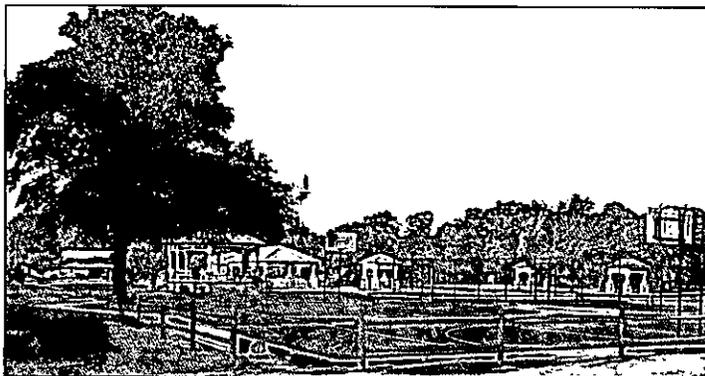
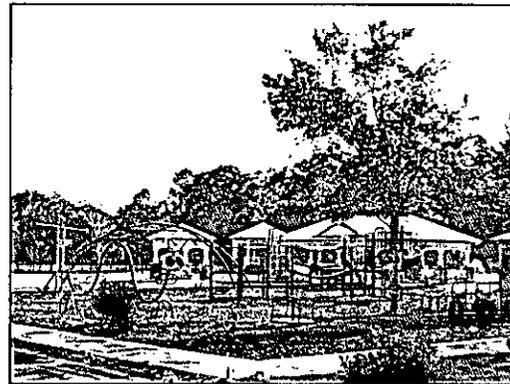
PROJECT NO. 6—TILLIE MILLER PARK REDEVELOPMENT FOR THE CITY OF CARRABELLE

HIGHLIGHTS:

- | | |
|---|---------------------------------------|
| ■ <i>Engineering design</i> | ■ <i>Planning</i> |
| ■ <i>Environmental permitting</i> | ■ <i>Public meetings</i> |
| ■ <i>Environmental sampling and testing</i> | ■ <i>Bid plans and specifications</i> |
| ■ <i>Architectural control implementation</i> | ■ <i>Grant applications</i> |
| ■ <i>Construction phase services</i> | |

ECT provided design, permitting, and environmental consulting services to the City of Carrabelle for the planning and redevelopment of Tillie Miller Park, including the following improvements:

- ECT provided structural, stormwater, and landscape designs;
- A new tennis court and walking trail;
- Resurfacing an existing basketball court;
- Redesign and construction of a children's playground area;
- Design and construction of a restroom facility, gazebo, and several open pavilions of various sizes and configurations.





ADDITIONAL INFORMATION:

LOCATION:	<i>Carrabelle, Florida</i>
CLIENT:	<i>City of Carrabelle</i>
ADDRESS:	<i>1001 Gray Avenue Carrabelle, Florida 32322 Courtney Dempsey, City Administrator, 850 • 697-2727</i>
PROJECT NUMBER:	<i>Numerous</i>
CONTRACT PERIOD:	<i>2006—2007</i>
CONTRACT AMOUNT:	<i>\$270,000 (construction) \$30,000 to date (ECT costs)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- *Lee S. Norris—Assistant Project Manager/Environmental Scientist*
- *Ron R. Potts, P.G., P.E.—Engineer*



PROJECT NO. 7—PLYMOUTH AVENUE PARKS AND RECREATION AREAS IN VOLUSIA COUNTY

HIGHLIGHTS:

- *Reuse of closed landfill site*
- *Regional soccer field complex*
- *Extension of public water supply*
- *Topographic and grading challenges*
- *Tree preservation*
- *FDEP permitting*
- *Secured dog park area*
- *Closed basin stormwater management system design*

This project consists of two separate recreational areas located within the site of a now closed municipal landfill. The 85-acre landfill site is owned by Volusia County, Florida, and these two recreational areas are under the administration of the county's Parks, Recreation and Culture Department. These two areas are at opposite corners of the property boundaries, and involve separate area design, permitting, development, and use. ECT worked jointly with Bellomo-Herbert, a landscape architectural firm, and was responsible for all civil and environmental engineering, and associated permitting through state agencies.

The 14-acre Barkley Square Dog Park provides areas for large and small dogs, as well as for training events. This area is heavily wooded and contains a small, lined pond within the large dog area. Other improvements include parking areas, a restroom, benches, dog watering stations, and fencing—all in an area of varying natural topography. Included in the park improvements was the extension of an 8-inch municipal potable water service line. The park opened in the spring of 2007.



The approximately 20-acre proposed Plymouth Avenue Soccer Park will be located both on top of the closed County landfill surface and within previously undeveloped county-owned property north of the closed landfill area. Site improvements proposed on the surface of the closed landfill area include five soccer fields. Proposed site improvements in the area adjacent to the closed landfill include a restroom building and associated septic system, parking areas, relocation and repaving of an existing road bisecting the project area, and dry retention ponds for stormwater management, all in a wooded area with elevations ranging from 43 to 67 feet. Challenges included tree preservation, grading of both these wooded sloped areas and the flat surfaces required for the five soccer fields, and permitting these facilities within a closed landfill area. This park area is currently awaiting construction.



ADDITIONAL INFORMATION:

LOCATION:	<i>Volusia County, Florida</i>
CLIENT:	<i>Bellomo-Herbert & Company, Inc., and Volusia County Parks, Recreation and Culture Department</i>
ADDRESS:	<i>202 N. Florida Avenue DeLand, Florida 32720 Tim Baylie, Director, 386 • 736-5953, ext. 2636</i>
CONTRACT PERIOD:	<i>October 2004—September 2006</i>
CONTRACT AMOUNT:	<i>\$27,075 (dog park) \$44,360 (soccer park)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- *Steven G. Danskine, P.E.—Project Manager and Engineer, Dog Park*
- *Chris R. Fagerstrom, P.E.—Project Engineer, Soccer Park*

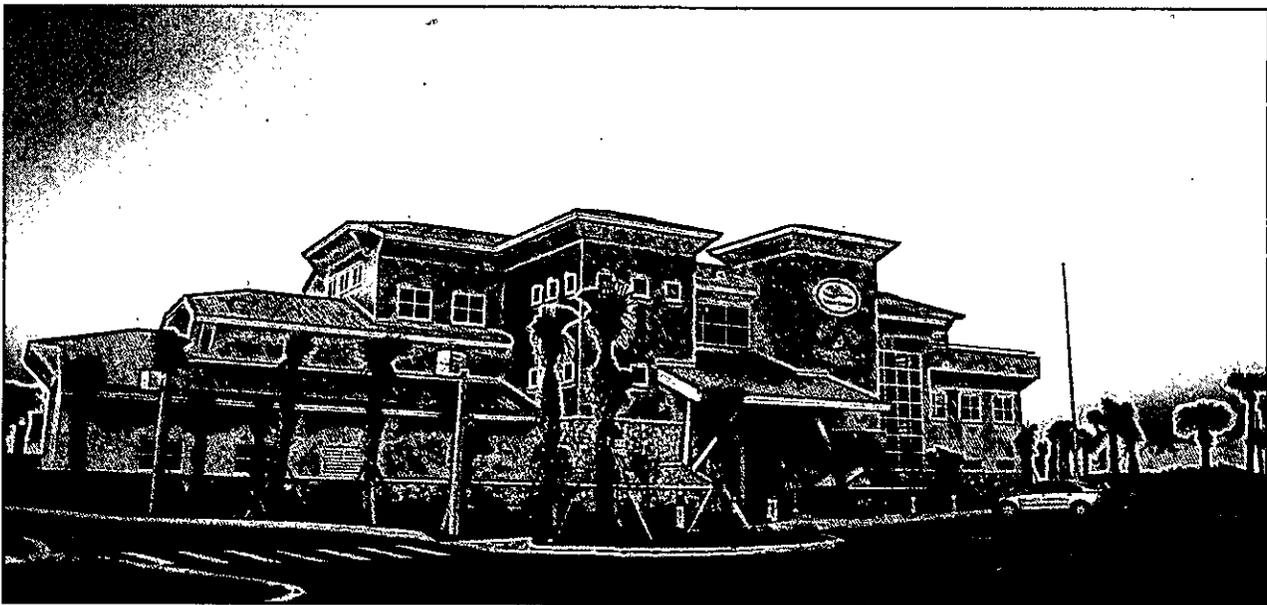


PROJECT NO. 8—BEACH SAFETY LIFEGUARD HEADQUARTERS SITE ENGINEERING

HIGHLIGHTS:

- *Multi-agency permitting requirements*
- *FDOT utility connection*
- *SJRWMD environmental resource permit*
- *FDEP coastal construction control zone*
- *FDOT driveway connection*
- *FDOT drainage connection*
- *City of Daytona Beach Utilities*
- *Construction drawing and specification preparation*

This project included coordination of simultaneous construction projects by various developers on adjacent parcels. The project required demolition of an adjacent motel and redevelopment of that parcel for beach access and parking by a separate developer; and construction of the Lifeguard Headquarters, which connects to an existing county-owned beachside park. Utilities included extension of potable, irrigation, and fire services from the existing water main located in the travel lane of State Road A1A and sewer connection to an existing service lateral at the edge of pavement. Permit applications were prepared and obtained for the onsite stormwater management system from the FDOT and SJRWMD. Due to limited green space, a combination dry retention pond for initial stormwater treatment was connected to an under-pavement exfiltration trench sized to meet both permitting agency requirements for water quality and quantity attenuation.





ADDITIONAL INFORMATION:

LOCATION:	Daytona Beach, Florida
CLIENT:	Schweizer, Waldroff Architects, Inc.
ADDRESS:	145 Canal Street New Smyrna Beach, FL 32168 Scott Waldroff, 386 • 426-0456
CONTRACT PERIOD:	January 2005—October 2008
CONTRACT AMOUNT:	\$34,250 (design) \$3,000,000 (construction—building and site work)

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- Chris R. Fagerstrom, P.E.—Project Manager
- Steven G. Danskine, P.E.—Project Engineer



PROJECT NO. 9—PROFESSIONAL SERVICES IN SUPPORT OF ENVIRONMENTAL RESOURCE PERMITTING PROGRAM FOR NWFWMDC

HIGHLIGHTS:

- ERP permit application reviews
- Technical reviews of drainage
- Calculations, geotechnical reports and other supporting information
- Permit application site inspections
- Technical reviews of construction drawings
- Other services as needed

ECT is providing ERP application reviews and other services. ECT is currently in the third year of a continuing services contract with the District and is utilizing employees with relevant experience from multiple office locations throughout Florida. This contract allows ECT scientists and engineers to provide a wide variety of services to the District. Services provided to date under this contract include the following:



- Administrative reviews of permit applications to determine completeness.
- Technical reviews of construction drawings, drainage calculations and stormwater modeling reports.
- Technical reviews of wetland impacts and assessment/mitigation reports.
- Site inspections to evaluate pre-development conditions and gather site information of engineering and ecological relevance to permit reviews.

ADDITIONAL INFORMATION:

LOCATION:	<i>All Counties within the District Boundaries</i>
CLIENT:	<i>Northwest Florida Water Management District</i>
ADDRESS:	<i>Bureau of Environmental Resource Regulation The Delaney Center, Suite 2-D 2252 Killearn Center Boulevard Tallahassee, FL 32309</i>
CONTACT:	<i>Lee Marchman, P.E., 850 • 921-2986</i>
CONTRACT PERIOD:	<i>October 2007—Ongoing</i>
CONTRACT AMOUNT:	<i>\$286,679 (to date)</i>

ECT PERSONNEL ASSIGNED TO THE PROJECT:

- *Ronald R. Potts, P.E., P.G.—Project Manager*
- *Larry J. Danek, Ph.D.—Project Director*
- *Lee A. Smith, P.E.—Permit Reviewer, engineering*
- *Ivan B. Chou, P.E.—Permit Reviewer, engineering*
- *Gary R. Cook—Permit Reviewer, engineering*
- *Maya R. Scohier—Permit Reviewer, wetlands*
- *Lisa D. Ricker—Permit Reviewer, wetlands*
- *Lealy S. Norris—Wetlands Field Inspections*



PROJECT NO. 10—MANATEE VIEWING CENTER FOR TAMPA ELECTRIC COMPANY

HIGHLIGHTS:

- Wetland functional assessment
- Wetland mitigation planning
- Stormwater design and permitting
- Mitigation monitoring/reporting
- Eradication of exotic plants
- Wetland permitting/mitigation approval
- Restoration oversight

Tampa Electric Company (Tampa Electric) operates the Manatee Viewing Center located adjacent to the discharge canal for the Big Bend Power Station near Apollo Beach in Hillsborough County, Florida. Because of the popularity of the facility, it became necessary to expand the parking area. One major requirement identified in the planning stage was the need to accommodate large numbers of elderly and handicapped visitors. ECT contracted to assist Tampa Electric in:

- Completing wetland functional analyses and mitigation assessments using Uniform Mitigation Assessment Methods (UMAMs) and Wetland Rapid Assessment Procedures (WRAPs).
- Preparing wetland impact justification and wetland mitigation/restoration plans for submittal to regulatory agencies.
- Providing stormwater/wetland permitting/design services.
- Preparing site drawings and bid documents.
- Providing restoration/construction oversight.
- Monitoring and reporting on the restoration areas created.

The expansion plans required filling in a 0.89-acre disturbed wetland area adjacent to the Viewing Center. The preferred mitigation site, located southwest of the Viewing Center, was dominated by Brazilian pepper, a non-native, exotic plant species. The mitigation proposes removing fill to restore the original hydroperiod to 1.16 acres of tidal flats, and enhancing 1.49 acres of disturbed uplands by removing exotic species and replanting native vegetation.



ECT obtained a stormwater/wetlands permit from the SWFWMD and a wetland permit approval from the Environmental Protection Commission of Hillsborough County (HC/EPC) for the mitigation plan. ECT was informed by the Director of HC/EPC that the proposed mitigation plan was the only one ever submitted to the mitigation board that was so thorough and complete, no changes were required. ECT also obtained stormwater permit approval from HC/EPC prior to proceeding with construction and mitigation/restoration. The parking area and mitigation was com-



pleted in 2007. Annual monitoring/reporting determined that the mitigation project was trending toward success.

ADDITIONAL INFORMATION:

LOCATION:	<i>Apollo Beach, Florida</i>
CLIENT:	<i>Tampa Electric Company</i>
ADDRESS:	<i>702 North Franklin Street Tampa, FL 33602 Adriano "Nate" Alcoz, 813 • 228-4843</i>
CONTRACT PERIOD:	<i>2006—2008</i>
CONTRACT AMOUNT:	<i>\$121,023</i>



PKS-B.2. Names and Descriptions of Relevant Projects Presently Under Contract

In Section PKS-B, ECT presented ten projects to show our experience in parks and recreational engineering. ECT also has additional park development and other related projects under contract. Representative projects (currently under contract) are provided in the following table:

Client	Brief Project Description	Projected Completion
City of Titusville	Evaluate, design, and permit a regional stormwater park. Project tasks include watershed modeling, stormwater retrofitting, and wetland marsh design.	11/2011
City of Gainesville	Design and permit a regional stormwater park. Project highlights include stormwater pump station design, onsite wetland mitigation, baffle box design, lined ponds, and 1,300 linear feet of bulk head wall.	11/2012
City of Carrabelle	Civil engineering design, permitting, bidding and construction phase services for replacement and hardening of failing drainage infrastructure, site re-grading and armoring design to stabilize erosion prone areas, design of a structural system to create a quiescent pool for erosion control and sediment removal, preparation of associated littoral zone and upland landscape planting plans, and removal of invasive plants.	03/2011
Wentworth Building Corporation	Civil engineering evaluation of existing site civil infrastructure, ecological study, and master planning for redevelopment of an historic plantation property to construct a new medical facility in Thomas County, Georgia. Services to date have included master planning consultation and recommendations for phased transportation, water, wastewater and stormwater infrastructure improvements.	03/2011



Client	Brief Project Description	Projected Completion
Monticello Plantations, LLC	Civil engineering planning, design and permitting services for water, sewer, roadways, grading, drainage, stormwater management facilities, common area parks and walking/cycling trails in a 115-acre residential development in Monticello, Florida.	06/2011
Silver Lake Dairy, Inc.	Engineering analysis, design and ERP services for a hydraulic control system retrofit, to modify an existing permit for an agricultural impoundment with a failed overflow system in Jefferson County, Florida.	03/2011
SeaWorld Parks and Entertainment	NPDES permit compliance.	9/2013

Note: ECT has an additional recreational park design and restoration projects completed before 2005. These include:

- PFC Emory Bennett Park.
- Hickory Mound Wildlife Management Area.
- Buena Vista Park.
- North Beach Parks.
- Lighthouse Point Park.
- River Breeze Park.
- South Daytona Riverfront Park.
- New Smyrna Beach Marina.
- New Smyrna Yacht Club.
- Lake George Fishing Pier.
- Henry Ford Museum.
- Newburgh Lake Recreational Park.
- Buhr Park.
- Waterford Oaks County Park.
- Nine Dragons Marina.



PKS-B.3. Firm's Process and Procedures for Insuring Conformance to Current Design Standards, Codes and Other Regulatory Direction

ECT recognizes its responsibility as a professional consulting firm to always be aware of current rules, regulations and standards, so that we can provide our clients with the highest quality services.

ECT's Tallahassee office staff are well versed in the Leon County regulatory environment, as well as the federal, state and regional regulations that typically apply to projects that would be likely to be assigned under this RFQ.

Additionally, ECT uses processes and procedures that serve to keep our employees current on changes in design standards, codes, and other regulatory direction, including the following:

- ECT's established Corporate Quality Plan (CQP), which defines the policies and procedures for controlling the quality of all facets of ECT's technical work, including field data collection, field survey methods, data analyses, and project deliverables, as well as efforts performed by subcontractors, and project communications.
- Interim technical reviews conducted at appropriate project milestones by senior technical staff not directly involved in production work for the task to be reviewed.
- During the development of a proposal for a new task assignment under a continuing services agreement, ECT's project staff will routinely review, as needed, applicable federal, state, regional and local design standards, codes and regulatory guidance documents prior to *finalizing the proposal and initiating* the new project.
- ECT engineers and scientists typically hold at least one pre-application meeting with applicable permitting agencies for a new project that appears to have the potential for a significant degree of permitting complexity. The purpose of the pre-application meeting is begin a dialogue with the permitting agency, to identify potential obstacles to project execution and completion, and to ensure the path to obtaining needed permit approvals and completing the project is well defined. Such meetings are typically held at project inception, and follow-on meetings are often appropriate prior to permit application submittals for more complex projects, or for evolving project concepts. It is often advantageous to hold at least one such meeting onsite.
- ECT's corporate culture encourages its engineers and other project professionals to maintain active membership, and to pursue leadership roles, in a variety of professional associations and societies (see individual resumes). Our employees are currently well represented in the membership of the Florida Stormwater Association, the Florida Section, American Water Resources Association, the Florida Lake Management Society, and similar professional organizations.



- ECT also encourages its professionals to author and present papers on current topics at professional meetings.
- ECT strongly encourages its professionals to achieve and maintain industry-standard certifications as appropriate to their area of specialization.
- ECT has established a water resources/natural resources practice line that holds regular firm-wide conference calls, typically on a quarterly schedule. These calls provide a forum for coordination on current technical and regulatory issues on a firm-wide basis, and serves as a starting point for ongoing local, state and region-specific in-house discussions. All of the key personnel identified for this project are members of ECT's water resources/natural resources practice line.

In addition to the above listed practices, our professionals keep current with applicable design standards, codes and regulations through other means such as the following:

- Project assignments that involve reviewing ordinances and building codes for the state, various counties, and cities where we also provide design services.
- Membership in various local and state agency technical committees.
- All professional engineers on the project team, including the project manager and assistant project manager, and the engineering task managers, are subject to continuing education requirements applicable to their field of practice.
- The project manager for this work category, as a certified D.WRE, is subject to significant additional continuing education requirements, amounting to 30 professional development hours (PDH) per year. The assistant project manager, due to the credentials he maintains, is also subject to a 30 PDH per biennium requirement.
- Because of ECT's many agency clients, we have ongoing access to developing information on regulatory changes.

Finally, ECT provides in-house technical training sessions (e.g., brown-bag seminars) several times a year to promote depth of knowledge and cross-training. Because of the nature of our services, these training sessions necessarily include coverage of pertinent regulatory considerations and "developing stories" in the regulatory realm.

PKS-B.4. Basic and Special Resources Available to the Firm for Performance of Project Duties in this Work Category.

A professional team of environmental consultants such as ECT's must be backed up by the essential facilities and equipment. The most essential equipment and software for this project include:



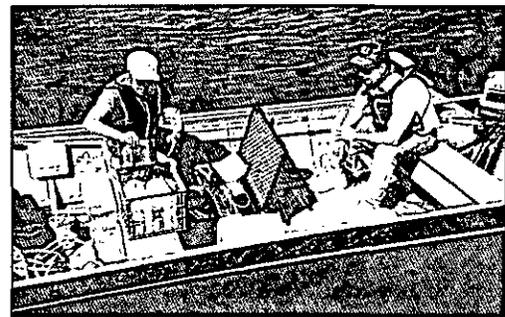
• **Surface Water Equipment (Remote Sensing)**

- ISCO® Avalanche samplers
- ISCO® Model 750 area velocity flow modules
- ISCO® Model 674 rain gauges
- ISCO® Model 4250 flow sensors
- Protective housing enclosures
- Solar panels
- Cables and wiring harnesses, complete set per station
- ISCO® SPA 1489 digital cellular modems
- ISCO® software/lap top computers for data downloading



• **Other Surface Water Equipment**

- YSI® Model 556 pH, temperature, conductivity, and DO meter
- Hydrolab® Surveyor II water quality meter
- pH/conductivity meters (various manufacturers)
- Price-AA velocity meter
- Pygmy velocity meter
- Marsh-McBirney electromagnetic velocity meter
- Checkmate® water quality meters
- Teledyne Gurley® current meters
- Turner Designs® Model 10-005 fluorometer
- Water sampling bottles
- Leupold & Stevens® water level/tide recorders
- Turbidimeter
- Fathometer
- LORAN navigation system
- Global positioning system (GPS)
- Marine radios
- Water level gauges
- Teledyne portable samplers
- Rain gauges



• **Miscellaneous**

- Vehicles (4WD, etc.)
- Survey equipment
- Cameras (digital, various)
- Stereoscopes
- Portable electric generators
- Safety equipment (Level A through D)
- Self-contained breathing apparatus
- Metal detector
- Electronic depth finders



• **Computers and Peripherals**

- Windows® Server 2000/2003 network
- Intel® Xeon dual and quad processor based servers (5 TB storage)
- CAD/GIS dedicated workstations
- Intel Core 2 duo, Core i3, quad, and Pentium 4 processor-based PCs
- 3.0 HZ dual core ESRI GIS workstations
- RAID and LTO2 and -3 based backup system
- CD and DVD writing capabilities
- Mobile user remote access capable
- Laser printers—black and white and color
- Scanners—black and white and color
- Full-size color plotting capabilities
- Digital copying capabilities
- Internet access
- Ultra Mobile PC (UMPC) Ruggedized Panasonic Toughbooks (with GPS/ArcPad)
- Trimble GeoXT and Trimble Ranger GPS units
- ESRI ArcMap Arc/Info, ArcEditor, and ArcView
- ESRI 3D Analyst and Spatial Analyst (Raster calculator)
- LP360 - LiDAR Analysis
- GRASS GIS - Specialized Modules for Hydrology
- HSPF/WinHSPF
- HSPEXP (expert system that assists with the calibration of HSPF models)
- GenScn (GENERation and analysis of model simulation Scenarios)
- BASINS3
- MODFLOW-GMS
- MODFLOW-GW Vistas
- GSFLOW
- PEST
- Microsoft® Word for Windows, Version 97 through 2007 (word processing)
- Microsoft® Excel Version 97 (spreadsheet) through Excel 2007
- Microsoft® Power Point 97 (presentation package) through Power Point 2007
- Microsoft® Project 2007
- Microsoft® Access 2007 (relational database)
- Adobe® Acrobat 9

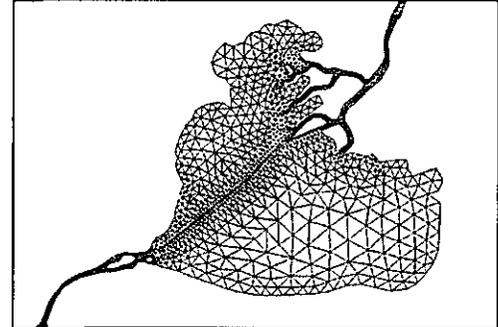
• **Numerical Models**

Surface Water

- | | |
|----------------|---|
| ○ AdICPR | Interconnecting pond routing model |
| ○ CE-QUAL-W2 | Two-dimensional laterally averaged hydrodynamic and water quality model |
| ○ EFDC | Three-dimensional hydrodynamic and water quality |
| ○ Visual Hydro | SWMM/EXTRAN models with graphical interface |
| ○ XP-SWMM | SWMM/EXTRAN with GUI |
| ○ SWMM-IV | Stormwater management |



- | | | |
|---|-----------|--|
| ○ | EXTRAN | Dynamic flow routing model |
| ○ | HEC-1 | Surface runoff hydrograph |
| ○ | HEC-2 | Flood routing |
| ○ | HEC-HMS | Surface hydrology |
| ○ | HEC-RAS | Water surface profiles |
| ○ | WASP | Surface water quality |
| ○ | HSPF | Surface runoff and runoff quality |
| ○ | QUAL2E | Riverine water quality |
| ○ | RECEIV-II | Receiving water quality |
| ○ | CAFE | Two-dimensional estuarine or lake circulation |
| ○ | DISPER | Two-dimensional estuarine or lake circulation |
| ○ | PLUME | Near-field mixing zone |
| ○ | DEM | Dynamic estuarine |
| ○ | CORMIX | Mixing zone analysis |
| ○ | DCORMIX | Dredged material disposal |
| ○ | CORMIX-GT | Windows version of CORMIX |
| ○ | VPLUME | Initial mixing zone |
| ○ | FORFLO | Forest floodplain succession model |
| ○ | RMA2 | Two-dimensional circulation and dispersion model |
| ○ | SMS/BOSS | Two-dimensional circulation and dispersion model |
| ○ | BASINS3 | GIS-based watershed and water quality model |
| ○ | GENESIS | Shoreline movement model |
| ○ | SBEACH | Beach erosion model |
| ○ | RCPWAVE | Wave refraction model |
| ○ | Pond Pack | Detention pond design |
| ○ | TR-20 | Stormwater runoff |



Groundwater

- | | | |
|---|--------------|--|
| ○ | GW VISTAS | ESI – MODFLOW Package |
| ○ | MOD INV | Parameter optimization |
| ○ | MODFLOW | USGS, 3-D groundwater flow model |
| ○ | MODFLOW EM | Extended memory version |
| ○ | MODPATH | USGS, 3-D particle tracking program |
| ○ | PRE/POST MOD | Pre- and post-data processor for MODFLOW |
| ○ | MODRET | MODFLOW for retention ponds |
| ○ | ZONEBUDJET | Subregion zone, budget package |
| ○ | MOC | USGS, 2-D solute transport and flow model |
| ○ | PREMOC | Pre-data processor for MOC |
| ○ | MOC NRC | USGS MOC Code modified for Nuclear Regulatory Commission |
| ○ | MT3D | 3-D contaminant transport model |
| ○ | PLASM | Prickett & Lonquist, 2-D, aquifer simulation model |



- AQTESOLV Geraghty & Miller aquifer test solving program
- SUTRA USGS, 2-D saturated/unsaturated transport and flow model
- WHPA IGWMC wellhead protection area program
- BIO PLUME II RIFA, simulation of transport and biodegradation of dissolved hydrocarbons
- ROKEY SYSTEM 3-D, analytical contaminant transport model
- LUCKY 7/NO DCAY Parameter estimation models

PKS-C. WILLINGNESS TO MEET SCHEDULE AND BUDGET REQUIREMENTS

In the consulting industry, repeat business from satisfied customers allows companies to grow and prosper. To obtain repeat business, environmental consultants must provide clients with a quality product that not only meets expectations, but is also delivered on schedule and at or below the budgeted cost. ECT has grown over the years as a result of providing quality products on schedule and budget. **ECT makes a commitment to Leon County for this proposal that we will meet all schedules and budget requirements.** ECT has had several projects with the County over the past 5 years where we successful in meeting schedule and budget requirements.

PKS-D. EFFECT OF THE FIRM’S RECENT, CURRENT AND PROJECTED WORKLOAD

PKS-D.1. Names and Descriptions of Projects for Which Firm is Presently Under Contract and the Anticipated Completion Dates of Those Projects.

ECT has between 1,000 and 1,100 projects active at any given time. These projects are valued from a few hundred dollars to over \$20 million in size. Because ECT has so many projects active, we are providing a representative listing of some of our larger projects in Florida, and also some managed out of the Tallahassee office. Known or estimated completion dates are provided for these projects. The “ongoing” project designation is used where ECT has a contract to provide services on a task basis without an end date for the overall contract.

Client	Management Office	Brief Project Description	Completion Date
The Pantry	Gainesville	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing



*Parks and Recreational Facility Engineering
Leon County Request for Proposals No. BC-03-17-11-25*

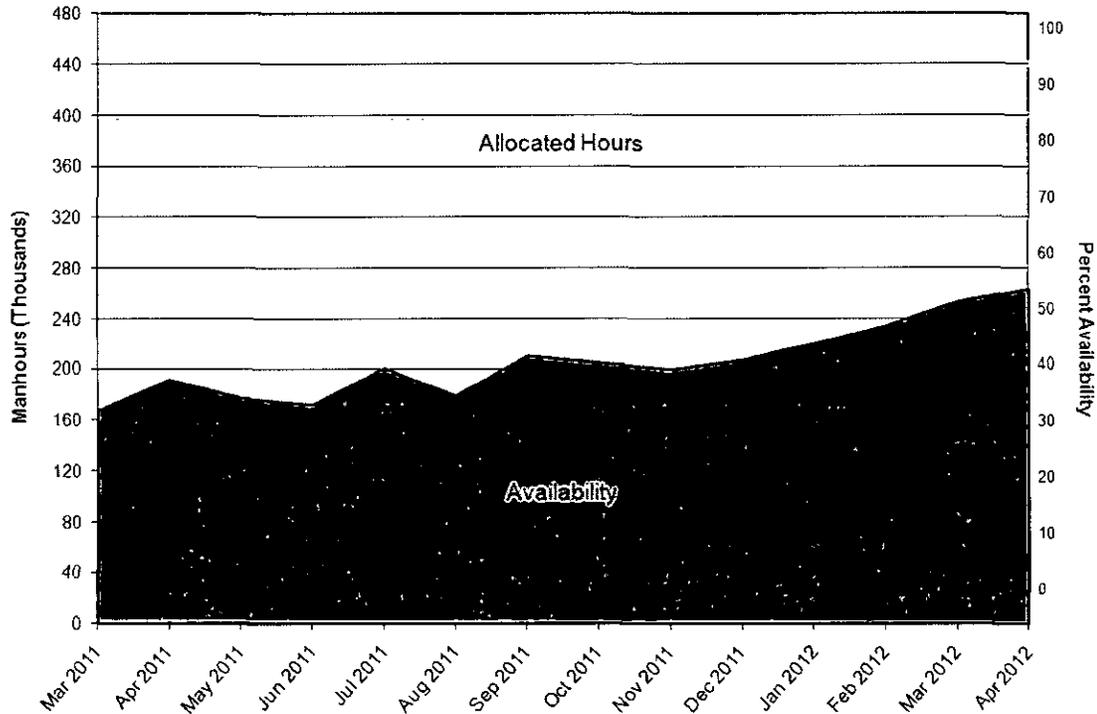
Client	Management Office	Brief Project Description	Completion Date
Scaff, Inc.	Tallahassee	Provide contamination assessments, remediation, and other services at locations throughout Florida.	Ongoing
NFWFMD	Tallahassee	Permit reviews and approvals for ERP applications.	9/2011
City of Tallahassee	Tallahassee	Brownfield site remediation	9/2011
City of Carrabelle	Tallahassee	Wharf restoration project	12/2011
City of Gainesville	Gainesville	Remediation of brownfield site and design and construction of stormwater park.	12/2011
SWFWMD	Tampa	Provide technical personnel to supplement District staff in all areas of water resource engineering, modeling, and data management.	9/2013
Hillsborough County Airport Authority	Tampa	Provide environmental consulting services to assist in acquisition of property and expansion of Tampa International Airport.	9/2015
FDEP	Gainesville	Petroleum remediation services.	9/2012
Eckerd College	Tampa	Asbestos, indoor air quality, and other environmental health consulting services	Ongoing
The Trust for Public Land	Tampa	Provide Phase I/II ESAs	Ongoing
City of Newberry	Gainesville	Provide environmental services as City's environmental staff.	Ongoing
SWFMD	Fort Lauderdale	Risk assessments, contamination assessments, QA, and remediation at land acquisition sites in South Florida.	5/2016



Client	Management Office	Brief Project Description	Completion Date
Mosaic Fertilizer, L.L.C.	Tampa	Developments of regional impact, permitting, and environmental consulting with respect to expanding phosphate mining areas in central and southwest Florida.	Ongoing
Alachua County	Gainesville	Environmental consulting services on a task order basis.	9/2013
The Nature Conservancy	Orlando	Phase I/II ESAs, contamination assessments, and other environmental consulting services.	Ongoing
Major theme park (confidential)	Orlando	Provide regulatory compliance, contamination assessments, remediation, O&M of remediation systems, and other environmental consulting services.	Ongoing
SeaWorld	Orlando	Provide NPDES permitting and other environmental consulting services.	9/2013
Tampa Electric Company	Tampa	Provide environmental consulting services on a task order basis.	Ongoing
Volusia County	New Smyrna Beach	Provide Phase I/II ESAs, contamination assessments, remediation, risk assessments, and other environmental consulting services on a task order basis.	9/2012

PKS-D.2. Firm’s Ability to Absorb Any Projects Resulting from this Contract

ECT’s project team has more than adequate staff availability to complete any projects assigned by Leon County in a timely and efficient manner, as shown in Section PKS-A1. The following table has been provided to indicate the percentage availability for both the ECT staff and the key subcontractor proposed for this project during 2011. The graph provided depicts the projected ECT company backlog (allocated hours) and percent availability for 2011. ECT has a staff of 232, with over 170 personnel located in eight Florida offices. From the Florida staff, we have sufficient depth of qualified and experienced personnel to provide any level of additional technical support beyond the primary project team (shown on organizational chart) that the project may need, and make a commitment to meet all scheduling requirements.



PKS-E. EFFECT OF PROJECT TEAM LOCATION

As described earlier in this proposal, the project will be managed from ECT’s local office in Tallahassee. It is anticipated that most of the work will be completed by our local office and subcontractors located in Leon County. ECT’s local personnel can be at the County’s project management office in less than 15 minutes, and have shown the ability to provide this response time on previous County contracts.

In the event additional personnel are needed, ECT will primarily utilize our offices in Florida. In the event a unique task is assigned that is more applicable to personnel in other offices, we will provide those personnel as required. Our intent is to minimize travel cost (and thereby reduce costs to the County) by using the Internet, video conferencing, and telephone if we need to interface with personnel in other offices. We routinely interface between offices on many company projects that are ongoing.

PKS-F. APPROACH TO THE PROJECT

ECT’s proposed approach to accepting and completing specific projects assigned under this contract may vary considerably depending upon the nature of the assignment, but as



an example a generic project approach, which could be applied to a variety of common parks and recreation facility engineering design-bid-build projects, is summarized as follows:

Contract Kick-Off

Upon award of the contract, ECT's project management team will schedule a kickoff meeting with Leon County contract management personnel to discuss the contract and review the general scope, scheduling needs, budgetary constraints, relative priorities and client expectations relative to ECT's performance under the contract.

Task Negotiation

For specific tasks in which the County desires ECT's services, it is anticipated that task negotiations will generally proceed as follows:

Problem Definition

ECT will conduct a needs assessment to clearly define the problem to be addressed. Although the details of a needs assessment are highly task-specific, this commonly begins with an informal conversation, aided by review of background graphics, correspondence, and other relevant information, leading to a problem definition that is mutually satisfactory to the County and ECT. An initial site visit and an initial review of background site information, such as County records or public databases, may be appropriate at this stage.

Project Approach

For projects of significant complexity, ECT will develop a proposed project approach for the County's concurrence. Conceptual pre-application discussions with permitting agency personnel may be appropriate at this stage, and further discussion between ECT and the County may be required, leading to identification of specific County expectations for satisfactory completion of the project, and agreement between the County's project manager and ECT on a task-specific project approach. For relatively straightforward projects, County review in this step may not be needed and in such cases, ECT will progress to Proposal Development.

Proposal Development

ECT will develop a proposal defining a scope of services, budget and schedule that is proposed by ECT to implement the selected project approach. The proposal will also identify any applicable project deliverables and associated timeframes, meeting schedules and travel requirements as applicable. Following County review, any necessary adjustments to the proposal will be negotiated between the County and ECT, leading to issuance of a project-specific Task Authorization to ECT by the County.



Task Performance

Following ECT's receipt of a project-specific Task Authorization from the County, ECT will proceed with completion of the authorized scope of services, generally as follows:

Project Kick-Off

ECT will schedule and conduct internal and client kick-off meetings appropriate to the Task Authorization. Internal kick-off meeting participants will typically consist of the ECT project team professional staff and in some cases subcontractor personnel. Client kick-off meeting participants will typically consist of County staff, ECT's project manager and possibly key ECT project personnel, and in some cases subcontractor personnel and/or third-party stakeholders.

Project Performance

ECT will complete the project assigned under the terms of the approved Task Authorization, including conduct of applicable agency pre-application meetings and/or public meetings, performance of the scope of services, and preparation of deliverables. The following are examples of tasks that will commonly be included in the scope of services for a parks and recreation facility engineering project:

- Conduct a detailed desktop analysis of site-specific information obtained from such sources such as TlCGIS, the NRCS Web Soil Survey, the U.S. Fish & Wildlife Service National Wetland Inventory online mapping tool, FDEP's LABINS website, the Leon County Property Appraiser's website and other public databases.
- Onsite evaluation of existing conditions by ECT engineers and scientists, and applicable subcontractors, such as, for example, surveyors and geotechnical specialty consultants.
- Evaluate site constraints (e.g., land use/zoning issues, property ownership issues, possible presence of wetlands, listed species/habitat issues, severe slopes, etc.) and/or hindrances to project completion.
- Develop and evaluate conceptual alternative design solutions and prepare a preliminary engineering design. Initial modeling of hydraulics and hydrology, and/or feasibility studies, may be appropriate for some projects at this stage.
- Hold pre-application agency meetings to review the selected preliminary design.
- For some projects, it may be appropriate to hold public outreach events (e.g., neighborhood open house) and third-party stakeholder meetings.
- Adjust preliminary design and revisit agency pre-application meetings if appropriate.
- Obtain planning level project approvals as needed.
- Prepare final engineering design, specifications, and permitting documents. Hold additional pre-application meetings to review project concept changes implemented during the final design process, if appropriate.



- Provide bidding and bid review assistance as desired by the Department.
- Attend the onsite pre-construction conference with the County's project manager, construction contractor, applicable subcontractors and other parties (e.g., construction material suppliers) as appropriate, to formally introduce all parties, to accomplish project administrative coordination, to reinforce project communication, notification, submittal and 3rd party testing protocols as spelled out in the contract documents, to review permit compliance issues, etc.
- Provide construction administration services during project build-out and review any 3rd-party testing results.
- Complete record (sometimes called "as-built") drawing certifications and close out construction phase permits.

APPENDIX A

**COMPANY AND INDIVIDUAL
LICENSES AND REGISTRATIONS**

Licensee Details

Licensee Information

Name: **Environmental Consulting & Technology, Inc. (Primary Name)**
(DBA Name)

Main Address: **3701 NW 98th Street**
GAINESVILLE Florida 32606

County: **ALACHUA**

License Mailing:

LicenseLocation:

License Information

License Type: **Certificate of Authorization**

Rank: **Cert of Auth**

License Number: **5520**

Status: **Current,Active**

Licensure Date: **11/29/1989**

Expires: **02/28/2013**

Special Qualifications **Qualification Effective**

[View Related License Information](#)

[View License Complaint](#)

**Contact Us :: [1940 North Monroe Street, Tallahassee FL 32399](#) :: Call.Center@dbpr.state.fl.us :: Customer Contact Center
850.487.1395**

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Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions regarding DBPR's ADA web accessibility, please contact our Web Master at webmaster@dbpr.state.fl.us.

**ECT HAS NOT YET RECEIVED PERMANENT
RENEWAL LICENSE. SEVERAL OF THE STAFF RENEWAL
LICENSES HAVE NOT BEEN RECEIVED YET.**

AG# 4995777

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

SEQ# L10061501486

DATE	BATCH NUMBER	LICENSE NBR
06/15/2010	090484128	GB42

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2012

ENVIRONMENTAL CONSUL & TECH, INC
3701 NW 98TH ST
GAINESVILLE FL 32606

CHARLIE CRIST
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHARLIE LIEM
INTERIM SECRETARY

State of Florida

Department of State

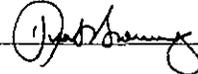
I certify from the records of this office that ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC. is a corporation organized under the laws of Delaware, authorized to transact business in the State of Florida, qualified on February 1, 1989.

The document number of this corporation is P22824.

I further certify that said corporation has paid all fees due this office through December 31, 2011, that its most recent annual report was filed on February 18, 2011, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Nineteenth day of February, 2011



Secretary of State



Authentication ID 000195025170-021911-P22824

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.
<https://efile.sunbiz.org/certauthver.html>

AC# 4735563 STATE OF FLORIDA
 DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
 BOARD OF LANDSCAPE ARCHITECTURE SEQ# L09112600305

DATE	BATCH NUMBER	LICENSE NBR	THE STATE OF FLORIDA
11/26/2009	098091688	LCC000211	

The LANDSCAPE ARCHITECT BUSINESS Named below HAS REGISTERED Under the provisions of Chapter 481, FS. Expiration date: NOV 30, 2011

BELLOMO HERBERT & COMPANY, INC.
 801 NORTH ORANGE AVENUE, SUITE 730
 ORLANDO, FL 32801

CHARLIE CRIST GOVERNOR
 CHARLES W. DRAGO SECRETARY
 DISPLAY AS REQUIRED BY LAW

State of Florida
 Board of Professional Engineers
 Leland Andrew Smith, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 2/28/2013 P.E. LIC. NO: 50794
 AUDIT NO: 228201310482

State of Florida
 Board of Professional Engineers
 Ronald H. Hays, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 28-FEB-11 P.E. LIC. NO: 38496
 AUDIT NO: 228291120017 DISPLAY AS REQUIRED BY LAW

AICP

DARREN L. STOWE

HAS QUALIFIED AS A
 MEMBER
 AMERICAN INSTITUTE OF CERTIFIED PLANNERS

JULY 1990
 DATE OF MEMBERSHIP

Signature
 PRESIDENT

Signature
 SECRETARY

INSTEP
 The International Society of Technical & Environmental Professionals, Inc. (INSTEP)

Hereby Certifies That
 Darren Stowe, (I.T.P.# 91)
 Is a Member in Good Standing

Membership # 610
 Expiration Date: December 31, 2011

Signature

AC# 4735543 STATE OF FLORIDA
 DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
 BOARD OF LANDSCAPE ARCHITECTURE SEQ# L09112600305

DATE	BATCH NUMBER	LICENSE NBR	THE STATE OF FLORIDA
11/26/2009	098091688	LCC000211	

The LANDSCAPE ARCHITECT BUSINESS Named below HAS REGISTERED Under the provisions of Chapter 481, FS. Expiration date: NOV 30, 2011

HERBERT, GLENDON H
 427 N RIVERSIDE DR
 EDGEWATER, FL 32132

CHARLIE CRIST GOVERNOR
 CHARLES W. DRAGO SECRETARY
 DISPLAY AS REQUIRED BY LAW

State of Florida
 Board of Professional Engineers
 Chris R. Edgerton, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 28-FEB-11 P.E. LIC. NO: 46048
 AUDIT NO: 228201310472

State of Florida
 Board of Professional Engineers
 Steven C. Provost, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 28-FEB-11 P.E. LIC. NO: 19173
 AUDIT NO: 22820115429 DISPLAY AS REQUIRED BY LAW

State of Florida
 Board of Professional Engineers
 Ronald M. Edenfield, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 2/28/2013 P.E. LIC. NO: 45206
 AUDIT NO: 228201314072

State of Florida
 Board of Professional Engineers
 Ivan Bei-Zu Chou, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 2/28/2013 P.E. Lic. No: 30688
 AUDIT NO.: 228201309740

State of Florida
 Board of Professional Engineers
 Steven G. Danskin, P.E.

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
 Expiration: 28-FEB-11 P.E. Lic. No: 82496
 Audit No: 228201112974 DISPLAY AS REQUIRED BY LAW

State of Florida
 Board of Professional Engineers
 Doyle Edward Cottrell, P.E.

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
 Expiration: 28-FEB-11 P.E. Lic. No: 38108
 Audit No: 228201115831 DISPLAY AS REQUIRED BY LAW

STATE OF FLORIDA
 DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
 BOARD OF PROFESSIONAL ENGINEERS
 ONE SACRAMENTO LICENSE RSE
 106/04/2010 09217484 801303
 THE PROFESSIONAL REGULATOR
 Based below IS LICENSED
 Under the provisions of Chapter 471 FS.
 Expiration date: JUL 31, 2012
 NOTE: RONALD R
 2492 ROAD 22
 TALLAHASSEE FL 32308
 CHARLES CRIST GOVERNOR CHARLES LLOYD ENTRAIN SECRETARY
 DISPLAY AS REQ. BY LAW

State of Florida
 Board of Professional Engineers
 Richard A. Hall, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
 EXPIRATION: 2/28/2013 P.E. Lic. No: 21458
 AUDIT NO.: 228201302930

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GBCI

GREEN BUILDING CERTIFICATION INSTITUTE

HEREBY CERTIFIES THAT

Melanie Harris

HAS MERITED THE DESIGNATION OF

LEED[®] ACCREDITED PROFESSIONAL

BY DEMONSTRATING THE KNOWLEDGE OF GREEN BUILDING PRACTICES
 REQUIRED FOR SUCCESSFUL IMPLEMENTATION OF THE GREENING IN ENERGY
 AND ESTABLISHMENT DESIGN (LEED)[®] GREEN BUILDING RATING SYSTEM[™]



Dmytrch

March 21, 2009

Pete Zappalà

APPENDIX B

RESUMES OF PROJECT SUPPORT PERSONNEL

RONALD M. EDENFIELD, P.E.
Senior Engineer II
Project Assignment: Civil Engineering

Education

B.S., Agricultural Engineering—
University of Georgia, 1983

Years with ECT—12
Other Firms—17

Registrations

Professional Engineer, Florida,
No. 45200

Affiliations

American Water Resources Association, State Board Member
Fort Myers Kiwanis Club, Member and Past President
Lee Soil and Water Conservation District, Past Chairman
IMPACT of Lee County, Inc., Board Chairman
American Society of Civil Engineers, Member
Lee County Local Planning Agency, Past Member

Areas of Specialization

Surface and Ground Water Management Systems Design and Permitting, Ecosystem Hydrological Restoration, Stormwater Quantity and Quality Treatment Systems Design and Permitting, NPDES Pollution Prevention System Design

Project Manager; City of Fort Myers Stormwater Master Plan, City of Fort Myers—Evaluate the existing stormwater management system within the corporate limits of the City of Fort Myers for the purpose of recommending stormwater retrofit and water quality improvement systems in order to meet NPDES and TMDL requirements for discharges from the City's MS4 system.

Project Manager; Estero Boulevard Improvement Project, Lee County Board of County Commissioners—Provide drainage and water quality treatment system design for Estero Boulevard. Coordinate with teams members on location of, and design criteria for, improvements to the primary transportation corridor within the Town of Fort Myers Beach: including treatment system options, treatment system siting, outfall identification, and recommendations for improvements and state permitting.

Project Manager; Babcock Ranch Preserve, Florida Department of Agriculture and Consumer Services—Responsible for hydrological assessment of state- and county-owned land in Charlotte and Lee Counties in the Babcock Ranch Preserve area.

Project Manager; North Estero Boulevard Drainage and Water Quality Retrofit Project, Town of Fort Myers Beach—Stormwater and civil engineering, design, permitting, and construction management for a Hazard Mitigation Grant Program (HMGP)/South Florida Water Management District (SFWMD)-funded drainage and water quality improvement project for the north portion of Estero Boulevard from Time Square to Bowditch Point. Project requires redesign of existing arterial roadway to address chronic flooding problems while including innovative stormwater treatment elements to protect the estuarine receiving water bodies.

Senior Engineer, Watershed Evaluation, City of Bonita Springs—Responsible for evaluation of watersheds contributing flow to the Bonita Springs corporate area (for purposes of determining impacts of potential development to the water resources of Bonita Springs).

Senior Engineer, Density Reduction/Groundwater Recharge Watershed Evaluation, Lee County—Responsible for assessment of marketable limerock mineral deposits within Lee County, Florida. Provided data assessment and groundwater modeling.

Project Manager; Flood Litigation; Williams Farms, Inc.—Provide hydrologic and hydraulic assessment and expert witness for flooding litigation.

Project Manager; Billy Creek Filter Marsh Project, City of Fort Myers—Design, permitting, and construction management of an off-line treatment marsh adjacent to Billy Creek, an urbanized natural creek system. The created system will settle and filter urban stormwater runoff from the creek prior to discharge into a cypress wetland that is to be restored as part of the project. The cypress system will return flows to Billy Creek which flows into the Caloosahatchee River.

Project Manager; Manuel's, Carrell & Winkler Canal Retrofit Project, City of Fort Myers—Design, permitting, and construction management of canal retrofit project for the purpose of improving stormwater quality prior to discharge to the Caloosahatchee River. The retrofit includes diversion weirs, off-line treatment, and stream-bank restoration.

Project Manager; Beach Retrofit Project, Town of Fort Myers Beach—Stormwater civil engineering, design, permitting, and construction management for a town-wide drainage retrofit program to provide enhanced stormwater quality in accordance with NPDES and State of Florida guidelines. Program calls for retrofit of existing drainage systems in intensely developed residential and commercial areas to reduce nuisance flooding, and requires a net beneficial water quality improvement of the drainage system.

Project Engineer; Hydraulic Analysis, Florida Power & Light Company—Performed hydrologic/hydraulic analysis on 7 miles of power line access and maintenance road through the environmentally sensitive C.M. Webb Wildlife Management area in Charlotte County, Florida. Provided detailed assessments and mappings of wetlands, surface water basin, and sub-basin delineation; and field supervision of construction crews.

Project Manager; Ten Mile Canal Filter Marsh Project, Lee County—Design, permitting, and construction management of a canal-side stormwater quality improvement project for Lee County. Project will divert flow from an approximately 11-square-mile urbanized drainage basin for treatment prior to discharge into Estero Bay.

Project Manager; Research Facility, Wright Construction Group—Site design and local and state permitting for Seminis' 20-acre agricultural research facility in Hendry County, Florida.

Project Manager; Billy Creek Filter Marsh Phase I, Exotic Removal, City of Fort Myers—Provided project oversight during the clearing of the exotic monoculture from the 56-acre site preserving viable clusters of native vegetation. The project was then redesigned to integrate the preserved areas of mature oaks, maples and hickories into the treatment and recreational trails system.

Project Manager; Bunche Beach Improvements, Lee County Parks & Recreation Department—Provided site design and permitting services for development of a County-owned inland island for use as a recreational amenity including docks, boardwalks, restroom facilities, and parking.

Project Manager; Ortiz Avenue Bridge Hydraulics Report, Aim Engineering & Surveying, Inc.—Provided subconsulting services to provide complete bridge hydraulics report per Florida Department of Transportation standards for Lee County Department of Transportation project.

STEVEN G. DANSKINE, P.E.
Staff Engineer I
Project Assignment: Civil Engineering

Education

B.S., Environmental Engineering—University of Florida, 1997

Years with ECT—6
Other Firms—8

Registrations

Professional Engineer (Civil),
Florida, No. 62496

OSHA 40-hour Hazardous Waste
Operations and Emergency Response (HAZWOPER) training
and 8-hour annual refresher

Affiliations

Florida Engineering Society
Daytona Chapter Officer

Areas of Specialization

Site Engineering Design (grading, drainage, paving), Stormwater Management System Design, Flood Mitigation, Water and Sanitary Sewer System Design Permitting, and Construction Administration

Project Engineer; Lake Gibson Southwest Drainage Basin Watershed Management Plan, City of Lakeland—Assisted in preparing a watershed management plan for the Southwest Basin of Lake Gibson in accordance with the SWFWMD's guidelines and specifications. The project included developing a GIS database for the basin that includes inventoried structures, updated land use, soils, digital terrain model, 100 and 500-year floodplain mapping, and the basin junction-reach network. The watershed management plan included preparing a watershed evaluation plan, floodplain analysis, surface water assessment, and a BMPs alternative plan.

Project Manager; Central Beach Flood Mitigation Phase II, City of New Smyrna Beach—Responsible for design of roadway, water, and sewer utilities replacement and stormwater collection system for a 6 square-block-area in the Central Beach area of New Smyrna Beach, Florida. This \$2.2 million project consists of shell road reconstruction, inlets, piping, and stormwater vaults, and exfiltration with pretreatment prior to pumping. Other project tasks include plan and specifications generation, bidding assistance, and construction phase services.

Project Manager; Second Street South Baffle Box, City of Cocoa Beach—Responsible for the stormwater quality monitoring for the Second Street South Baffle Box which is a Suntree Design second generation baffle box for nutrient removal prior to discharge to the Banana River Lagoon. The study monitored nutrients with respect to grain size, and is utilized by the 319(h) grant program by the EPA and FDEP for evaluation of this type of treatment device.

Project Manager; Fairmont, Westwood, North Flood Mitigation, City of New Smyrna Beach—Responsible for the design and permitting for flood mitigation of a 1-square-block area in New Smyrna Beach, Florida. The project requires evaluation of flooding, modeling, public presentation of options, and design and permitting of upgrades to the drainage system in this area.

Project Manager; Ocean Beach Boulevard Bio-Retention Project, City of Cocoa Beach—Responsible for the design and permitting for the stormwater treatment for a 1.5-mile stretch of Ocean Beach Boulevard. The project reconstructs the entire corridor, reducing paved surface; replaces raised medians with bioswales to provide for stormwater runoff treatment where none previously existed; and utilizes existing infrastructure to the maximum extent practicable. Requires coordination with landscape designer, roadway designer, City and Utility departments, and SJRWMD.

Project Manager; Beach Condominium, Private Developer—Responsible for design and permitting for site civil design and stormwater facilities for the development of a residential site in New Smyrna Beach, Florida. This project required that the stormwater treatment system meet the requirements of the FDEP and the City of New Smyrna Beach while meeting Coastal Construction Control requirements.

Project Manager; Smyrna Lofts, Private Developer—Responsible for design and permitting for civil site stormwater and utility facilities for the redevelopment of a commercial site in New Smyrna Beach, Florida. This project required that the stormwater treatment system meet the requirements of the SJRWMD and the City of New Smyrna Beach.

Project Manager; Baker Avenue and Connecticut Avenue Water Main Replacement, City of Lake Helen—Responsible for the design and permitting for the replacement of 2,700 linear feet of water main, fire hydrants, and water services in the City of Lake Helen, Florida.

Project Engineer; B-23 Canal, Quentin L. Hampton & Associates, Inc.—Phase I stormwater monitoring, analysis of water samples, and analysis for effectiveness of stormwater improvements in the City of Port Orange, Florida.

Project Manager; A-1-A Reuse and Water Main Replacement Project, City of Ormond Beach—Responsible for the design, permitting and construction management of 4-inch reuse main and 12-inch water main along A-1-A in Ormond Beach, Florida. The 12-inch water main replaced an aging 4-inch water main serving numerous condominiums and business along nearly 1 mile of this utility congested right-of-way. This project required extensive coordination with permitting agencies, operations personnel, and customers during both the design and construction phases in order to minimize adverse impacts. It also included one 80-foot jack and bore crossing of the roadway.

Project Manager; S. Summit Avenue Improvement Project, City of Lake Helen—Responsible for the design, permitting, plans, and specifications of this Community Development Block Grant (CDBG)-funded project for improvement of approximately 1900 lf of this residential roadway. The existing dirt road was in dilapidated condition, and this multi-phased project incorporated all aspects of stabilization, stormwater treatment, and utility infrastructure to improve this neighborhood.

Project Engineer; Odessa Power Plant Evaporation Pond, Navasota—Responsible for construction phase services during construction of a 40-acre evaporation pond for the Odessa Power Plant in Odessa, Texas.

Project Manager; Potable Water Wells Replacement, Seminole Electric Cooperative, Inc. (SECI)—Responsible for the design and permitting for the replacement of three community potable water wells at the facility in Palatka, Florida. Includes substantial testing and monitoring services to comply with Department of Health and FDEP requirements.

Project Manager; Site Plan Review Services, City of Lake Helen—As the contracted City Engineer for the City of Lake Helen, these services include the site plan review of commercial and subdivision projects for traffic, utility, and stormwater compliance with City Ordinances.



STEVEN C. PROVOST, P.E.
Principal Engineer
Project Assignment: Civil Engineering

Education

M.S., Transportation and Traffic
Engineering—University of
California-Berkeley, 1965
B.S.C.E., Civil Engineering—
University of Connecticut, 1964

Years with ECT—9

Other Firms—38

Registrations

Professional Engineer (Civil),
Florida, No. 19173

Affiliations

Chi Epsilon, Civil and Environ-
mental Engineering Honor So-
ciety
Florida Engineering Society, Na-
tional Society of Professional
Engineers
American Society of Civil Engi-
neers
Institute of Transportation Engi-
neers

Areas of Specialization

Project Management, Multi-firm
Team Management, Engineering
Feasibility Studies, Site Engineer-
ing Design (grading, drainage,
paving), Water and Sanitary Sewer
System Design and Permitting,
Dredging and Water Use Support
Facility Design (boat ramps,
docks, piers) and Permitting, Con-
struction Cost Estimating, Con-
struction Administration, Grant
Applications, and Grant Manage-
ment

Project Manager; Sports Complex Expansion, City of New Smyrna Beach, Florida—Responsible for the planning, design and permitting for the four-phase expansion/renovation of the city's existing Sports Complex which serves the community-at-large as well as provides facilities for the New Smyrna Beach High School home games. The initial phase replaced two small poorly lighted baseball fields with one high school scale baseball field with state-of the-art lighting. The second \$2M+ phase added approximately 25 acres to the complex by incorporating an adjacent construction material land-fill. This phase included the addition of dugouts for the Phase one baseball field plus the addition of three soccer fields, a multi-purpose field and three softball fields. The \$3M+ third phase, completed in early 2004, included the replacement of the existing 2,000-seat football stadium with a 4,000-seat facility having a new football field and surrounding 400-meter rubberized track, home and visitor concessions, restroom, and locker buildings. The last phase, now under construction, will be the complete renovation of the four Little League scale baseball fields with new graded fields, irrigation, sports field lighting, dugouts, and a 2-story central pavilion with an open-sided lower floor and second level for the scorekeepers. Activities included coordinating architecture/planning/ electrical engineering support consultants, master plan and facility program preparation, onsite utility system design and permitting, sports field lighting plan coordination, grant preparation assistance, and construction administration coordination.

Project Manager; P.F.C. Emory L. Bennett Park, County of Volusia, Florida—Coordinated engineering services in association with a planning consultant for the development of a major county park. Activities included coordination of the design of the sports field grading plans, interior street system and parking lot plans, stormwater management system, and site utilities; assistance with the site plan submittal and review committee presentation; permitting; and project reviews during construction.

Project Manager; Buena Vista Park Reconstruction, City of New Smyrna Beach, Florida—Coordinated an architecture / planning/ engineering team for the planning, design, and permitting of the reconstruction of an existing park located adjacent to the Intra-coastal Waterway. Activities included coordination of the master planning and presentation of the plan alternatives to the public and elected officials; assistance with preparation of construction fund grant application; coordination with FDOT to obtain agreement to use FDOT right-of-way, coordination of site engineering, site lighting, restroom building, and landscape plan preparation; preparation of construction plans and permitting for fishing pier and shore edge rip rapping; construction cost estimating; bidding assistance; and project reviews during construction.

Project Manager; Cory Estates Canal Dredging Feasibility Study, County of Volusia, Florida—Responsible for completing a study for the dredging of a "finger canal" off the Indian River that was constructed when the subdivision was developed in the early 1960s. The results of the study will be presented to the residents adjacent to the canal to determine whether they will support the forma-

tion of a Special Assessment District to fund the cost of the dredging. Activities included collecting samples of the bottom sediments for physical and chemical analysis, estimating the quantity of material to be dredged, determining a location for the disposal of the dredged material and preparing a project cost estimate.

Project Manager; Ponce Inlet Side Channel Dredging, County of Volusia, Florida—Responsible of the planning, design and permitting for the maintenance dredging of a navigation channel off of the main channel between the Ocean to the Intracoastal Waterway at Ponce deLeon Inlet. The channel services a Volusia County public boat ramp, a marina used by ocean fishing charter boats, a commercial boat repair business and several residences. Activities included coordinating the collection of samples of the material to be dredged for physical and chemical analysis, development of a dredging plan and an estimate of the quantity of material to be dredged, determination of a site for the disposition of the dredge spoil, preparation of a project cost estimate, and assisting the County during bidding and construction.

Project Director; Site Engineering for Replacement of Three Fire Stations, City of New Smyrna Beach, Florida—Assisted with site evaluation, site engineering, and related activities for the replacement of the city's main station and two satellite stations. Activities for this project, which is in progress, include assistance with the evaluation of alternative sites, coordination of site surveys and geotechnical investigations, coordination of site engineering design, permitting, construction cost estimating, bidding assistance, and periodic project reviews during construction. Currently one fire station, which will also serve as the city's Emergency Operation Center, has been completed and the other two are in early design[2009—>\$65,000].

Project Director; City Marina Rehabilitation, City of New Smyrna Beach, Florida—Coordinated the architecture/engineering team for the planning, design, and permitting for the demolition and replacement of the existing marina slips, utilities, dockmaster/restroom building, and related bulkhead. Activities for this project, which is under construction, will include existing condition documentation, coordinating preparation of the replacement marina alternative concepts, coordinating a construction grant application, presenting the recommended plan to the public and elected officials, preparation of FDEP permit application, coordination of the preparation of the submerged land lease, design of utilities for the marina, coordinating preparation of construction documents, bidding assistance, and project reviews during construction.

Project Manager; Gabordy Canal Pedestrian Bridge, City of Edgewater/City of New Smyrna Beach—Coordinated the design and permitting of pedestrian bridge over Gabordy Canal that is located on the boundary between Edgewater and New Smyrna Beach, Florida. The bridge will connect existing sidewalks. Activities for this project included preparation of a report describing alternative bridge concepts; coordination of the design, permitting, and technical specifications for the selected bridge alternative; preparation of bid documents; and a final review of the completed bridge.

DOYLE E. COTTRELL, P.E.
Principal Engineer

Project Assignment: Construction Administration

Education

B.S., Civil Engineering—
Michigan State University, 1969

Years with ECT—14

Other Firms—26

Registrations

Professional Engineer, Florida,
No. PE0038188
Professional Engineer, Pennsylvania,
No. 02075-E
Professional Engineer, Louisiana,
No. E-22486
Professional Engineer, Maryland,
No. 20417

Areas of Specialization

Project Management, Remedial
Design and Construction Man-
agement, Environmental Com-
pliance Management Program
Development, Permitting Strategy
Development, Site Closures

Project Engineer; Oxbow Restoration, Henry Ford Museum & Greenfield Village and Wayne County—Developed a restoration plan to create designs to restore a historic river oxbow and provide habitat for both fish and wildlife. The project included the following tasks: topographic and bathymetric surveys, sediment analysis, wetland delineation and vegetative GIS mapping, modeling and hydroperiod analysis, development of design concepts and alternatives, development of restoration plan, conducting an environmental assessment, preparing plans and specifications, developing education programs, and preparing applications for permits. Also provided engineering oversight during the removal of sediments and restoration of the oxbow.

Chief Engineer, Newburgh Lake Restoration Project, Wayne County, Michigan—The Newburgh Lake Restoration project, part of the Rouge River National Wet Weather Demonstration Project, involved the excavation of 750,000 cubic yards of lake sediments, vegetation restoration, aquatic plant control, and fish habitat enhancement and stocking. Responsible for the oversight of all construction aspects of this project, as the owner's (Wayne County) resident engineer. In this role he was responsible for assuring that all construction activities were carried out in strict accordance with the contract specifications. This included daily oversight of all construction activities, providing technical support for resolution of all issues arising from unforeseen conditions, and monitoring project financial progress. Additionally, he was responsible for the proper manifesting of all sediments transported offsite, verifying that cleanup objectives are achieved, assuring that final lake bottom contours were attained, and that the structural stability of the lake shore and dam was maintained during the restoration project. This effort included the coordination of various technical support teams including sediment sampling, geo-technical testing, and surveying.

Cost and Schedule Engineer, \$200 Million Industrial Expansion, Aluminum Company of America—Responsible for the financial monitoring and project scheduling of this industrial expansion, reporting to the Construction Manager. This effort included the scheduling of all design, specification packages, and procurement, including equipment and materials. Monitoring included continuous review of project financial commitments, comparison to budgets, and monthly reporting of financial progress.

Construction Supervisor, Various Construction Projects—Responsible for the coordination of all activities related to the management and oversight of construction projects. These activities included design reviews for constructability, specification preparation, bidding support, contract management, and supervision of testing and inspection activities. Contracts were related primarily to general civil aspects such as earthmoving, demolition, blasting, and road and railroad construction.

Design Engineer; Landfill Closure, Alcoa—Designed multimedia caps for the closure of three different industrial landfills in Texas.

Pennsylvania, and Indiana. The caps included installation of artificial membrane linings and drainage systems to minimize water infiltration. The closure plan also included the design and installation of groundwater monitoring systems. Designed a leachate recovery system for an industrial landfill, an effort which resulted in the installation of a French drain system around the entire perimeter of the landfill. Leachate is collected by gravity flow to a series of collection sumps.

Construction Supervisor; Alcoa—Responsible for construction supervision at various industrial construction project sites throughout the United States. Responsibilities included specification preparation, cost and schedule control, and contract administration for various contracts including earthmoving, foundations, structural steel, superstructure covering, and HVAC installation.

Project Director; RCRA Compliance, Design, and Permitting; Alcoa Industrial Chemicals—Project director for various RCRA compliance services for an industrial facility in Polk County, Florida. Activities included conducting an operational audit to assess environmental liabilities and management, operational, and environmental issues related to RCRA waste management; past and current disposal practices; and environmental compliance with respect to air, water, solid waste, hazardous waste, and spill prevention and control. Also directed development of a RCRA management plan which describes RCRA status and requirements; RCRA management structure; responsibilities of plant personnel; waste storage, handling, and management procedures; reporting and recordkeeping requirements; required inspections and inspection checklists; and RCRA training requirements. Also responsible for identification of requirements and revisions to the facility's contingency plan as necessary for RCRA compliance.

Project director for preparation of RCRA waste analysis plan and sampling plan for hazardous waste characterization of RCRA surface impoundment sludges. Directed engineering design and development of construction documents, plans, and specifications to increase capacity of existing surface impoundment. Phase II of the project involved design to double size the impoundment

Project Manager; Lake Bonnet Study, City of Lakeland—Responsible for comprehensive diagnostic study of Lake Bonnet, located in Lakeland, Florida. Diagnostic study indicated the lake is impacted by organic sediments, stormwater runoff, and groundwater discharge. Studies determined the extent of phosphorus concentrations and the total loading. Recommendations were prepared for BMPs.

Project Manager, Environmental Permitting, PEI—Responsible for obtaining all environmental permits required for a new, 1,000-MW, natural gas-fueled generating plant in Palm, Pennsylvania. Included are Title V air permits, Section 404, NPDES, and numerous Pennsylvania and local permits.



DAVID J. SANDERS, E.I.
Associate Engineer I

Project Assignment: Construction Administration

Education

B.S., Civil Engineering—Florida
State University, 2009

Years with ECT—3
Other Firms—0

Registrations

Engineering Intern, Florida.
No. 1100013846

Areas of Specialization

Stormwater Design and Permitting, Construction Documents, Field Services, Petroleum Remediation Activities

Project Engineer; Avenue C North Drainage Improvements, City of Carrabelle—Supported design and permitting services for retrofit of existing drainage infrastructure located in the City of Carrabelle, Florida. Project involves (1) replacement of an existing dry detention pond, previously permitted to serve a 7-acre drainage area, with a larger wet detention pond to treat runoff from a total contributing area comprising 27.5 acres; (2) replacement of an existing, sediment-filled cross-drain and provision of sediment removal features, with the improved cross-drain discharging to the new wet detention pond; and (3) stabilization of existing scour-prone areas to reduce erosion and sedimentation.

Project Engineer; CR-30A Drainage Improvements, City of Carrabelle—Supported design and permitting services for replacement and hardening of a failing double 60-inch cross-drain, headwall and endwall system, stabilization of erosion prone areas and provision of a 1.5-foot high weir structure upstream from the cross-drains to maintain a quiescent pool for erosion control and sediment removal.

Project Engineer; New Planned Unit Development and Phase I Final Development Plan Design, Monticello Plantations, LLC—Assisted civil engineering design team in development of design and permitting documentation for water, sewer, roadway, grading, and stormwater infrastructure in the 115-acre first phase of a new 421-acre single-family detached housing residential planned unit development in Monticello, Florida. Development includes 133 residential units, common area parks, and walking/cycling trails.

Project Engineer; Engineering and Permitting Services for Domestic Wastewater Treatment Facility, Capital City Travel Center—Supported engineering consulting and permitting services for a privately owned extended aeration activated sludge domestic wastewater treatment and reuse system with two rapid infiltration basins in Lloyd, Florida. Assisted in preparation of application and associated documentation for permit renewal at a permitted capacity of 0.0175 MGD.

Technical Support; ERP Program Support, NFWFMD—Assisted project team with completeness reviews of approximately 30 stormwater ERP applications by performing ground-truthing site inspections and technical reviews of construction plans and specifications, stormwater design calculations, and related documentation.

Field Supervisor; Rhoden Cove Ecological Restoration, Leon County—Supervised field activities for a large ecological restoration, which included the eradication of non-native invasive plant species and the reintroduction of more native species around the Lake Jackson area.

Technical Support; Hopkins Copper Study—Collection of water samples from the City of Tallahassee's Hopkins power plant discharge stream for trace copper analysis.

JAMES E. POPPLETON
Senior Scientist II

Project Assignment: Wetlands/Ecology

Ecologist; Wetland Ecology, Sprout Project, City of Gainesville—Conducted all plant ecology field work including vegetation mapping, wetland delineation, functional assessments of wetlands and permit preparation for Phase I of a coal tar clean-up site in Gainesville, Florida. Assisted project engineers in designing post clean-up mitigation for inclusion in a city park master plan development including lakes, natural areas, and boardwalks.

Education

M.A., Botany—University of South Florida, 1976

B.S., Botany—University of Central Florida, 1972

Task Manager; Vegetation Ecology, Volusia County Stormwater Park, Volusia County—Managed vegetation mapping efforts, wetland delineation, functional assessments of wetlands and park design for a storm water retrofit design project for Volusia County, Florida. Design components including working with project engineers and Volusia County personnel on mitigating impacts associated with stormwater improvements as well as designing wetland enhancement and upland restoration areas as amenities to the plan for a public park on the site in New Smyrna Beach, Florida.

Years with ECT—21
Other Firms—14

Affiliations

Society of Wetland Scientists
Florida Association of Environmental Professionals

Florida Academy of Science
Member: Wetlands Management Advisory Council, Sarasota County Board of County Commissions

Advisor: Governor's Commission on the Future of Florida's Environment

Task Manager; Vegetation Ecology and Wetland Permitting, Brandon Shores to Riverside Transmission Line, BG&E—Conducted field studies to evaluate a proposed corridor for a 230-kV transmission line upgrade focusing on listed plant and animal species, wildlife utilization, forest resources, and wetlands in Baltimore City, Anne Arundel, and Baltimore City, Maryland. Prepared ecology portions of Sections 2 and 4 of the Certificate of Public Convenience and Necessity (CPCN) and direct testimony for CPCN hearings. Also prepared all necessary information for submission of a Joint Application for submission to the Maryland Department of the Environment (MDE) and the USACE for wetland impacts.

Areas of Specialization

Environmental Permitting, Ecological Assessments, Wetlands Mitigation and Restoration, Endangered Species Assessments, Wetland and Ecological Studies, and Plant Taxonomy

Task Manager; Vegetation Ecology, Dan's Mountain Project, U.S. Wind Force, LLC—Completed ecological field studies on several hundred acres on the ridge top of Dan's mountain in Allegheny County, Maryland, to gather information on forest extent and quality, delineate wetlands, and search for listed plant species. The site is proposed for the construction of 44 windmills to provide clean electrical energy. This information will be used to complete appropriate sections of a CPCN and wetland permit application to be submitted in 2005.

Task Manager; Ecology, Liberty Gap Wind Farm, Liberty Gap, LLC—Supervised and participated in an ecological survey of the ridge on Jack's Mountain in Pendleton County, West Virginia. Several hundred acres were traversed to determine the suitability for construction of 44 windmills to generate electricity. Duties included a detailed search of rock habitat for the occurrence of listed plants and animals with unique ecological requirements known to exist in the region. In addition, several parcels of adjacent land were inspected to determine the suitability for construction of access roads to the wind towers from an ecological perspective

Discipline Manager; Vegetation Ecology, AvMed—Completed detailed vegetation survey on 200+-acre parcel in Gainesville, Florida, proposed for hospital expansion and commercial/residential development to delineate wetlands, evaluate vegetation community types

and quality, and document the presence or absence of listed plant species. Completed all pertinent portions of the Development of Regional Impact (DRI) document regarding upland and wetland vegetation.

Task Manager; Vegetation Ecology, South Ft. Meade Mine Extension, Cargill Fertilizer, Inc.—Prepared plan of study and budgets for vegetation ecology portions of a proposed ADA for Cargill's 11,500+ acre mine extension site in Hardee, County Florida. Tasks included negotiations for the plan of study with Hardee County officials, the Central Florida Regional Planning Council, and FDEP's Bureau of Mine Reclamation. Managed up to three teams of ecologists to conduct mapping, functional assessments of wetlands (WRAP for the USACE; UMAM for FDEP), and intensive listed plant species evaluations using GPS. Oversaw all data input into GIS and QA/QC of data input and mapping efforts. Worked closely with client and agencies at all steps of project.

Discipline Manager; DRI Statement, Nu-Gulf Industries, Inc.—Directed and participated in ecological studies for a 4,500-acre phosphate mine in Manatee County, Florida. Duties included rare and endangered species evaluations, and identification of unique habitats and wetland assessment. Managed coordination of federal, state, regional and local agency jurisdictional delineations for permitting.

Project Manager; Postoperational Wetlands Monitoring, U.S. Generating Company—Prepared 5-year monitoring plan submitted to and approved by Martin County Planning Department, SFWMD, and FDEP. Conducted field work to gather data on preserved isolated wetlands to monitor possible effects on these wetlands due to the operation of a 300+ MW coal-fired electrical generating facility.

Ecology Discipline Manager; Siting Analysis for a Proposed Electrical Generating Facility, TECO Power Services Corporation—Conducted an ecological evaluation of a site near the International Airport in Panama City, Panama, being considered for development of an electrical generating facility.

Project Ecologist; Environmental Impact Assessment (EIA) for 120-MW San José Power Plant, Central Generadora Electrica San José, Ltda.—Responsible for vegetation and wetland surveys for EIA for 120-MW coal-fired power plant in Puerto Quetzal, Guatemala. Conducted transect surveys of mangrove areas which is a protected tree species in Guatemala and developed mitigation plan for mangrove replanting.

Project Scientist, Ecological Studies in Central and South America, National Science Foundation—Conducted ecological field studies focused on epiphyllous fungi and their hosts, including mangroves, in various areas of Central and South America including Belize, Honduras, El Salvador, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Venezuela, Puerto Rico, and Jamaica.



MAYA R. SCOHIER, PWS
Senior Associate Scientist I
Project Assignment: Wetlands/Ecology

Project Ecologist; Wetland Delineation and Threatened and Endangered Species Search, SeaCoast Natural Gas Pipeline Project; TECO Peoples Gas—Set joint FDEP/USACE wetland delineations along a 50-mile long SeaCoast proposed gas pipeline corridor in Jacksonville, Florida. Conducted threatened and endangered species searches along proposed corridor and photo-documented current conditions of the wetlands.

Education

B.A., Environmental Science—
University of Florida, 2002

Years with ECT—5
Other Firms—3

Registrations

Professional Wetland Scientist,
No. 1999
Maryland Qualified Professional
Stormwater Erosion and Sedimentation
Control Inspector, FDEP
No. 6566
Certified, Mine Safety and Health
Act training

Affiliations

Member of the Florida Native
Plant Society

Areas of Specialization

Environmental Permitting,
Terrestrial and Wetland Ecology;
Wetland Jurisdictional
Determination, Delineation, and
Permitting; Wildlife and
Endangered Species Surveys;
Land Use/Cover Mapping; Tree
Surveys; Mitigation Monitoring

Project Ecologist, Vegetation Mapping and Threatened and Endangered Species Search, Southern Company Generation—Conducted wildlife surveys and examination of habitats present on Mississippi Power's 1,650-acre tract of the proposed IGCC generating station in Kemper County, Mississippi. Incorporated the survey results into a listed species report, which served as an attachment to the EIS, prepared for DOE.

Wetlands Ecologist; Taylor Energy Center Licensing, Sargent & Lundy, LLC—Served as wetlands ecologist for Florida Municipal Power Agency's project involving 3,200 acres in Taylor County, Florida, proposed for a coal-fired power plant to be licensed through the Florida Electrical Power Plant Siting Act. Duties included wetlands delineations, hydric soils assessments, UMAM, and permit application preparation.

Project Ecologist; Lake Monroe Minimum Flows and Levels Assessment, SJRWMD—Conducted human use and water resource values assessment for Lake Monroe minimum levels considered by SJRWMD. Specifically, participated in assessing lake bathymetry conditions allowing for gradual downslope migration of desirable wetland communities in response to changes in water level by examining water depth at the waterward extent of emergent vegetation and mapping emergent vegetation communities onto a bathymetric map of Lake Monroe.

Project Ecologist; Mosaic Ona Mine Permitting Project; Mosaic Fertilizer, L.L.C.—Performed wetland functional assessment, using Uniform Wetland Assessment Method (UMAM), for 20,500-acre site proposed for surface phosphate mining in the Hardee County, Florida. The assessments entailed qualitatively and quantitatively characterizing location and landscape support, water environment, and community structure of each wetland in reference to high quality wetlands of the same type. Participated in field-meetings with the FDEP to review the scoring of the functional wetland assessments. The project required significant internal and agency coordination to ensure consistency among ecologists and reviewers.

Field Supervisor, Vegetation Ecology, Southern Company Generation—Assisted in managing all ecological tasks associated with the approximately 156 miles of linear facilities (natural gas and reclaimed effluent pipelines, transmission lines, and carbon dioxide pipeline) associated with Mississippi Power's proposed IGCC generating facility located in Kemper County, Mississippi. Duties included arranging logistics; leading several field crews; and gathering/analyzing vegetation data on uplands, wetlands, and listed species. Assisted in incorporating results from the linear facilities studies

as well as data gathered by other consulting firms for an approximately 1,600-acre power plant site and a 31,000-acre lignite mine site into an environmental impact statement (EIS) prepared for the DOE. Also produced two Preliminary Wetland Jurisdictional Form packages for submission to the USACE.

Project Manager; Gopher Tortoise Survey for City of Ocala, Central Testing Laboratory—Conducted a gopher tortoise survey on two parcels of land under the ownership of the City of Ocala, following the latest guidelines and methods outlined by Florida Fish and Wildlife Conservation Commission in Marion County, Florida.

Project Ecologist; SJRWMD—Participated in evaluating the area known as Dog Branch in Putnam County, Florida, for the purposes of recommending the planting plan.

Task Manager, Vegetation Ecology/Wetlands Permitting, BGE—Managed and directed field efforts to acquire data sufficient to satisfy the requirements of a Certificate of Public Convenience and Necessity. In addition, led wetland delineation efforts for the upgrade of transmission corridors in Harford, Anne Arundel, and Baltimore Counties, Maryland.

Project Ecologist; Lighthouse Harbor, Pringle Properties—Served as a project ecologist to delineate wetlands, assess hydric soils, prepare UMAM forms, and prepare permit application for a marina proposed to be located on the north shore of Little Lake Harris in Lake County, Florida.

Project Ecologist; Pine Level, Mosaic Fertilizer, L.L.C.—Served as an ecologist and a team leader to review, revise, and re-map the land use/cover on an approximately 24,000-acre tract of land located in both Manatee and Desoto Counties.

Project Manager; Wetland Due Diligence, The Epoch Corporation—Conducted an overview of the 2,000-acre project site in Bay County, Florida, to determine the general extent and quality of wetlands and habitats known to support listed species.

Project Ecologist; Wetlands Mitigation, Ellis Environmental—Assisted in coordinating the planting of vegetation in a tidally influenced area of the Mayport Naval Station in Duval County, Florida. Conducted monitoring and made recommendations biannually for the site.

Wetlands Ecologist; Development of Regional Impact Substantial Deviation, AvMed—Served as wetlands ecologist on a 186-acre property in Alachua County, Florida, proposed for a hospital satellite campus. Duties included wetlands delineations review with agency staff, hydric soils assessment, and research of local regulations pertinent to water resources buffers.

Project Ecologist; Dans Mountain Windforce, LLC—Served as an ecologist for proposed 69.6-MW renewable wind energy electric generating facility in western Allegany County, Maryland. Duties included wetlands delineations, hydric soils assessments, and permit application preparation.

GARY P. DALBEC
Staff Scientist I

Project Assignment: Field Services

Project Manager; Stormwater Flow Monitoring and Data Collection, SJRWMD—Responsible for designing and installing ISCO® sampling and flow monitoring systems on tributaries to Newnans Lake, Lake Lochloosa, Lake Monroe, and Lake Harney to collect stormwater data and assess nutrient loads from the tributaries.

Education

A.S., Environmental Technology—Santa Fe Community College, 1977

Project Scientist; Lake Jesup Stormwater Sampling, Seminole County—Assisted with the stormwater sampling program using ISCO samplers at five tributaries to Lake Jesup. Project conducted to assess nutrient loading from the five tributaries to the lake during storm events.

Years with ECT—11
Other Firms—23

Field Sampling Coordinator; Watershed Assessment, Mosaic Fertilizer, L.L.C.—Responsible for maintaining a 17-station monitoring network and associated water quality sampling and analysis to determine the baseline water quality of the South Fort Meade mine site extension in Hardee County, Florida. Sampling was conducted both monthly and quarterly for 27 parameters, including nutrient loading.

Registrations

SCUBA
Coast Guard Auxiliary Boating Skills and Seamanship
40-hour OSHA hazardous waste health and safety training
24-hour health and safety training for supervision of hazardous waste activities

Field Team Leader; Water Quality Studies, City of Port St. Joe—Coordinated and supervised diurnal oxygen and intensive water quality studies consisting of continuous 48-hour *in situ* water quality profiling at multiple stations. Intensive water quality sampling was conducted concurrently with *in situ* profiling and consisted of collecting over 600 samples for chemical analyses.

Affiliations

Florida Ground Water Association
Florida Society of Environmental Analysis

Field Team Leader; Water Quality Study, SECI—Study conducted to characterize ambient water quality and hydrographic conditions of the Fenholloway River and several of its tributaries for regional impact study. Responsible for the installation and maintenance of water level recorders, thermographs, and recording dissolved oxygen meters. Conducted monthly water quality sampling and discharge measurements on the Fenholloway River and tributaries.

Areas of Specialization

Surface Water Quality and Hydrology Studies; NPDES Permitting; Coordination and Oversight of Field Studies including Water Quality Sampling and Hydrology Measurements, Dye Tracer Studies, and Bathymetry Surveys; Quality Assurance/Quality Control Program Development; Environmental Instrumentation Operation and Maintenance; Data Validation and Management

Task Manager/Field Team Leader; WQBEL Study, City of Port St. Joe—Assisted with design and construction of curtain drogues, and coordinated and supervised continuous 48-hour drogue tracking surveys for large-scale Lagrangian current circulation studies.

Field Team Leader; Site Monitoring at Florida Rock Industries, City of Newberry—Responsible for annual DRI monitoring program to assess contamination potential in groundwater, surface water, and soils on Florida Rock Industries' properties located in Newberry, Florida. All sampling is conducted in compliance with FDEP QA/QC requirements/guidelines.

Project Manager; Rice Creek Water Quality Study, Georgia Pacific—Assessed paper mill effluent ability to meet Class III water quality standards after completion of mill process up-grades in Putnam County, Florida.

Field Team Leader; Land Acquisition Project, SFWMD—Coordinated and supervised multiple field teams responsible for installation and sampling of groundwater monitoring wells, collection

of surficial soil samples, and irrigation canal sediment samples at large agricultural sites. Sites were being evaluated for possible District acquisition as part of the Everglades Restoration Project. Approximately 6,000 acres of property were screened for groundwater and soil quality determination.

Task Manager; Groundwater Discharge Permitting, Pacific Corp—Responsible for acquisition of all data and information for preparation of a state-required groundwater discharge permit for a proposed 1,000-MW power generating facility. The permit was necessary for operation of evaporation ponds at the facility in Mona, Utah, to dispose of process wastewaters.

Project Manager; Orange Lake Sediment Consolidation Study, SJRWMD—Coordinated field surveys of drought-exposed top of sediment elevations and thickness for comparison with pre-drought survey data to assess possible sediment reduction caused by exposure to atmosphere and other oxidation process. Orange Lake reaches parts of Orange, Lake, Marion, and Alachua Counties.

Project Manager; Payne Creek Generating Station Cooling Reservoir Thermal Study; SECI—SECI Payne Creek Station will discharge heated condenser cooling water to a 570-acre cooling reservoir. The reservoir also receives heated condenser cooling water from another power generating facility which was built prior to and adjacent to SECI's facility in Hardee County, Florida. The thermal study involved installation of a network of recording thermographs in the reservoir to develop a comparative database to evaluate the heat dissipation characteristics of the reservoir prior to and following the Payne Creek Station startup.

Project Manager; Phase I ESA; Bell Mountain, Inc.—Conducted an ESA of a 500-acre site in Marion County, Florida, following ASTM standard practice protocols for site assessments.

Project Manager; Phase I ESAs, Adena Springs, South—Conducted Phase I ESAs of 600- and 1,640-acre tracts in Marion County, Florida, following ASTM standard practice protocols for site assessments.

Project Manager; Lake Griffin Access Canals Sediment Study; Lake County Water Authority—Project was a component of the Lake Griffin restoration program and involved cross-section measurements of sediment accumulation depths in 30 lake access canals. Additional task included collection of over 2 tons of sediment from 45 locations for chemical and physical characteristics analyses.

MICHAEL A. RACCA
Senior Technician I
Project Assignment: GIS/CAD

Years with ECT—3
Other Firms—8

Registrations

Certificate- CADWorx Plant Professional Training
Certificate - Manual Drafting & Design; Architectural Commercial & Building Design
Certificates-Civil 3D; Land Desktop: Autodesk Inventor Series and Professional (Piping, Cable & Harness); Land Desktop; AutoCAD Autodesk; AutoCAD Electrical

Areas of Specialization

AutoCAD Drafting and Design, Site/Facility Plans, Drawings, and All Phases of Final Construction Drawings (Plans, Sections, Cross Sections, and Details); Georeferencing Sites onto USGS Quad Maps and Conversion of Drawings to Different Coordinate Systems (i.e., State Plane, UTM, Lat-Long)

AutoCAD Specialist; Avenue C North Drainage Improvements, City of Carrabelle—Prepared CAD and GIS graphics as required for design and permitting of retrofit for existing drainage infrastructure located in the Carrabelle, Florida, including: (1) replacement of an existing dry detention pond with a larger wet detention pond; (2) replacement of an existing, sediment-filled cross-drain and provision of sediment removal features; and (3) stabilization of existing scour-prone areas to reduce erosion and sedimentation.

AutoCAD Specialist; CR-30A Drainage Improvements, City of Carrabelle—Prepared CAD and GIS graphics as required for design and permitting to replace and harden a failing double 60-inch cross-drain, headwall, and endwall system; stabilize erosion prone areas; and provide a weir structure upstream from the cross-drains.

AutoCAD Specialist; Monticello Pines Planned Residential Development and Phase I Final Development Plan Design, Monticello Plantations, LLC—Prepared CAD and GIS graphics as required for civil engineering planning, design, and permitting services for water, sewer, roadway, grading and stormwater infrastructure in the 115-acre first phase of a new 421-ac single-family detached housing planned residential development in Monticello, Florida. Phase I included 133 residential units, common area parks, and walking/cycling trails

AutoCAD Specialist; Incinerator Ash Building Demolition, City of Tallahassee—Prepared CAD and GIS graphics as required for incinerator ash building demolition brownfield project in Tallahassee, Florida.

AutoCAD Specialist; Phase II ESAs, Numerous Clients—Prepare AutoCAD graphics to include location of site, soil, and groundwater contamination maps; and soil boring and monitoring well locations concerning sites in North Florida that have environmental contamination.

AutoCAD Specialist; Environmental Remediation Programs; Numerous Clients—Prepare graphics in AutoCad for reports, including construction and as-built drawings for vacuum extraction systems, air sparging systems, site plans, trenching layouts, recovery well details/sections, equipment trailer layout, and electrical control systems.

AutoCAD Specialist; Phase I ESAs, Albertson Express Stations—Prepared CAD and GIS graphics for 15 site-specific reports, showing site locations, property boundaries, and site plan maps with details of each station.

AutoCAD Systems Specialist; CAD Centers of Florida—Implemented software/applications procedures to streamline design processes of engineering department. Developed CAD standards manual, provided AutoCAD training and various software applications.



Melanie Harris, LEED AP | Landscape Design

Melanie graduated from the University of Florida with a Bachelor of Landscape Architecture, and started as a landscape designer in 2005. Since this time, she has worked on a variety of projects including small neighborhood parks, resource based parks, high-rise condominium projects and urban projects for both public and private sector clients. Melanie's role at the firm is to assist in conceptual design, landscape plans, and cost estimates. This experience has increased Melanie's skill set; she works well with other consultants; manages projects efficiently; and has become an excellent production manager.

Melanie also has good communication skills, strong graphic and computer skills and effectively manages budgets and schedules.



glenn@bellomo-herbert.com

Education

> Bachelor of Landscape Architecture,
University of Florida, 2005

Professional Registration

> LEED Accredited Professional from
the U.S. Green Building Council

Professional Affiliations

> Florida Native Plant Society
> Central Florida Flowering Tree Society

Representative Projects:

Atwater Community Park, Northport

Big Mulberry Branch Management Plan, Palm Coast

Big Mulberry Branch Trail, Palm Coast

Childs Park, Mount Dora

Coraci Sports Park, Port Orange

East Lake Sports Complex, Lake County

Ft. Mellon Park, Sanford

Hackney Prairie Park, Ocoee

Lake Nona Neighborhood Parks and Nature Trail

Longs Landing Estuary, Palm Coast

Longs Landing Management Plan, Palm Coast

Naples's Children Museum, BHM/City of Naples

Palm Coast Waterfront Park, Palm Coast

Rockefeller Off-Beach Parking, Ormond Beach

Seminole County Environmental Learning Center, Seminole County

Smyrna Settlement Archeological Site, New Smyrna Beach

Station Square Park, Clearwater

Tavares Parks Master Planning, Tavares

Wilbur-by-the-Sea Off-Beach Park, Wilbur-by-the-Sea

Woodlea Sports Complex, Tavares

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Firm Profile

BH *Established in 1990*, Bellomo-Herbert and Company is led by a seasoned team of principals with nearly 85 years of combined experience. We have established a corporate culture that allows our staff of gifted professionals to raise the standard of planning and design services to a new level, producing innovative and sustainable solutions that meet our client's objectives. In response to the challenges that growth has pressed upon Florida's fragile environment, the firm has endeavored to create not just beautiful works that are sensitive to the environment, but works that tell the story of Florida's rich cultural, historical, environmental and artistic heritage.

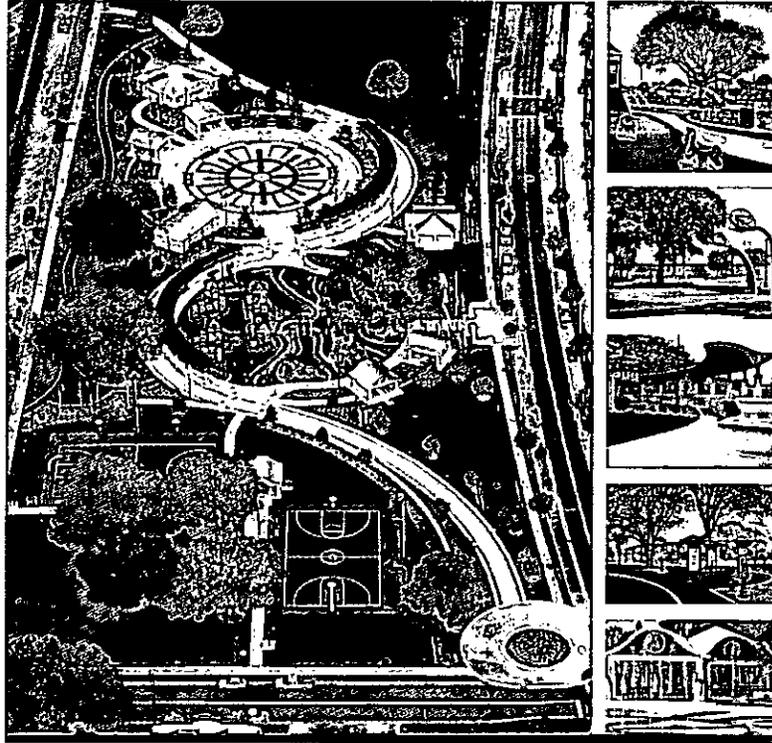
Our beliefs drive us. The firm operates under a fundamental planning and design philosophy that seeks to develop design solutions that make a positive contribution to the economic and social values of a community. Whether the question is growth management, infrastructure delivery, impact mitigation, development regulation or financing alternatives; intelligent, experienced answers are required. We have established an environment in which our people can rise to new challenges, working together to pioneer ideas and solutions that add value to every project.

The most demanding aspect of design is not creating form; it is defining the client's needs accurately and completely. Our clients are encouraged to be an integral part of the design process. We listen to their concerns, their desires, and their needs, then use our expertise to deliver effective and efficient solutions.

The marketplace in which we practice is exceedingly more complex than ever before, and our ability to meet the demands of changing professional requirements is a hallmark of our success. The complexity of larger projects often requires the integration of a broad range of disciplines, and we frequently assume the lead role as "manager" of full-service, integrated, Project Teams.

We provide responsive, personalized service to private and governmental clients who desire the very best in planning and design, and many of our projects have received state and national recognition and have been featured in national publications. Although we have designed some singularly memorable and important projects, the strength of our work lies in our ability to be invited to design multiple projects that collectively have the power to transform an entire community. The fact that the majority of our work is for repeat clients speaks volumes about our capabilities and our commitment to the success of every project.

P A R K S

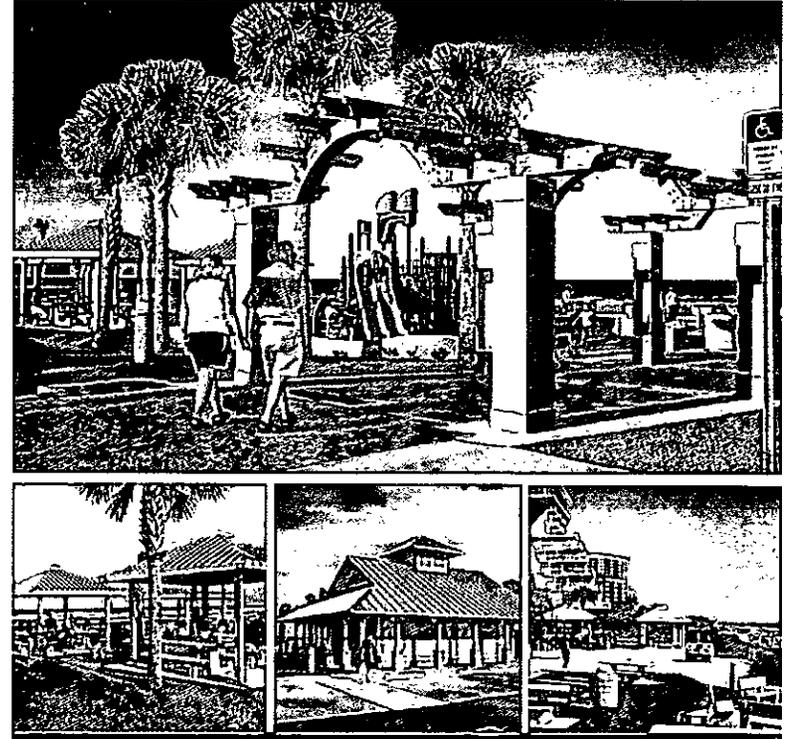


Fort Mellon Park is a spectacular resource located in the heart of downtown. This diamond in the rough has been re-born and features a host of family oriented recreation opportunities, allowing Ft. Mellon Park to once again serve as the city's gathering place.

Project: Fort Mellon Park
 Location: Sanford, FL
 Client: City of Sanford



P A R K S



Frank Rendon Park is another Volusia County beachfront park that was created to provide off-beach parking. Although this is its primary function, the amenities along the beach front provide visitors an opportunity for picnicking, playing on a "ship" themed playground or strolling along the promenade enjoying the beach views.

Project: Frank Rendon Park
 Location: Daytona Beach, FL
 Client: Volusia County Parks and Recreation



P A R K S



Lake Eola Park located in the heart of downtown Orlando, is an oasis in an urban core. Described by the mayor as "one of the most successful public projects ever undertaken by the city," the park is home to special events, annual festivals, Shakespearean theater and the destination for hundreds of thousands of visitors each year.

Project: Lake Eola Park
 Location: Orlando, FL
 Client: City of Orlando



P A R K S



Lock Haven Park dramatically enhanced the face and character of the Orlando Community. The Great Lawn, a central feature of this cultural park, plays host to festivals and special events throughout the year. This park, the recipient of state and national awards, was presented an environmental design award by First Lady Barbara Bush in a White House ceremony.

Project: Lock Haven Park
 Location: Orlando, FL
 Client: City of Orlando



P A R K S



Gemini Springs Park, generating 6.5 million gallons of fresh water per day, is one of the county's most popular resource-based parks. Purchased by the county to assure the preservation of this pristine site adjacent to the St. Johns River, its use is limited to a prescribed carrying capacity, determined during the management planning.

Project Gemini Springs Park
 Location DeBary, FL
 Client Volusia County
 Parks and Recreation



P A R K S



The Marine Science Center, nestled in a pristine coastal hammock, functions as an educational center and a rehab facility for sick and injured sea turtles. The successful integration of interpretive and educational experiences has forever established it as one of Volusia County's most important ecotourism offerings.

Project Marine Science Center
 Location Lighthouse Point Park,
 Ponce Inlet, FL
 Client Volusia County
 Parks and Recreation

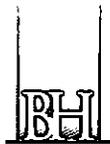


P A R K S

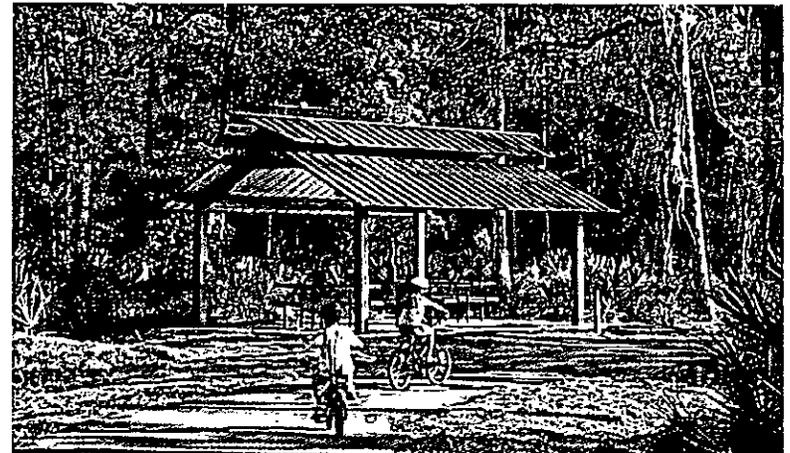


Riverbreeze Park is the County's response to a growing demand for water-based recreation. As a result of users defining the needs through a series of public meetings, the park provides state of the art facilities that offer a full range of recreational opportunities.

Project: Riverbreeze Park
 Location: Oak Hill, FL
 Client: Volusia County
 Parks and Recreation



P A R K S



Palm Coast Greenway encompasses 56 acres in the heart of residential areas of Palm Coast. The design preserved numerous natural communities and provides a centrally located trailhead and several other amenities such as a canoe rental concession and launch, paved bicycle trails, soft hiking trails and footbridges for residents and visitors to experience.

Project: Palm Coast Greenway
 Location: Palm Coast, FL
 Client: City of Palm Coast





COWLES LANDSCAPE ARCHITECTURE
David L. Cowles, Jr., R.L.A. / 2285 Trescott Drive / Tallahassee, FL 32308 / (850) 545-7035 / www.cowlesLA.com

RESUME

Professional Registration:

Registered Landscape Architect, Florida Number: LA6666917
ISA Certified Arborist, Number: FL-5314A

Education: FAMU, Master of Landscape Architecture, 2000
FAMU, B.S. Landscape Design & Management 1996
TCC, AA 1993

Experience: 2009-present Cowles Landscape Architecture (owner) / Tallahassee, Florida
2007-present FAMU, SOA - MLA (adjunct teaching) / Tallahassee, Florida
2000-2009 Moore Bass Consulting, Inc. / Tallahassee, Florida
1994-2000 Cowles Landscaping (owner) / Tallahassee, Florida
1994 Hauge Landscaping / Tallahassee, Florida
1993 Ferrell Construction / Tallahassee, Florida

Design Experience:

Type – theory; analysis; site planning; ecology; environmental permitting; irrigation; plant identification; theory; cost estimating; schematics; presentation graphics; construction details.
Scale – Regional; Community; Institutional; Campus; Urban; Park; Garden Design and Residential.
Permitting – Natural Features Inventory; Environmental Site Assessment; Canopy Road Tree Mitigation Permit; NPDES; F.D.O.T. Drainage/Driveway; F.D.E.P. Stormwater; County/City Stormwater; County/City Site Plan Modifications; Reforestation Calculations; Certified Arborist Consultation Services.

Teaching – Adjunct Professor in the FAMU School of Architecture; MLA graduate level courses for six semesters (Landscape Graphics, Landscape Construction, Site Engineering and Site Implementation.)

Technical Experience:

AutoCAD; Adobe; Adobe Photoshop; Microsoft Office Excel; Microsoft Office Word; Microsoft Office Outlook; FDEP Qualified Stormwater Management Inspector; Sketchup

Abilities:

The practical applications of my strong horticultural background and hands-on work experience are balanced with technical competency, knowledge of ecology, design theory and presentation graphics.

Awards:

2000 – FAMU – ASLA: Certificate of Honor (For Excellence in the Field of Landscape Architecture)
1997 – FLDA – The 1997 Landscape Design Award: Winner (Design Category)

SELECTED PROJECT EXPERIENCE

Florida State University (FSU):

2001 - 2008

Landscape Architecture experience for FSU Campus renovations and new construction projects including master planning, landscape plans, irrigation plans, details, site amenities, certified arborist consultation, construction administration and LEED qualifications.

List of Projects:

Woodward Avenue Pedestrian Corridor	Parking Garage #1
Heritage Grove	Parking Garage #2
Thrasher Building (College of Medicine)	Parking Garage #3
Covered Tennis Facility / Multipurpose Teaching	Parking Garage #6
West Dining Facility	Psychology Building
Ragans Hall	Wildwood Residence Hall
Band Field	Seminole Golf Clubhouse
Student Services Building	Thagard Health Center
King Life Sciences Building	Chemical Sciences Labs
Call Street Pedestrian Corridor – Phase 1, 2, 3 & 4	Classroom Building
Magnetic Lab Tower	Muphree Street Corner
Panama City Academic Center	

Tallahassee Memorial Hospital (TMH):

2001 - 2008

Landscape Architecture experience preparing Natural Features Inventory and Environmental Impact Analysis for tracts associated with TMH campus expansion. Produced landscape & irrigation plans for the Bixler Emergency Center and multiple properties adjacent to Surgeons Drive.

Capital Circle / Design Guidelines – Blueprint 2000 Improvements:

Blueprint 2000

2004

Landscape Architecture experience preparing plans and guidelines for new landscaping (associated with road widening), multi-use trail, amenities and stormwater pond multi-use park.

Bradfordville Target:

Target Corporation

2004

Landscape Architecture experience preparing Environmental Management Plans, wetland mitigation documents, natural area management plan, stormwater management irrigation area plans, FDEP and NPDES permitting documents.

Rivers Landing – Private Subdivision:

Pepper Ghazvini

2005

Landscape Architecture experience including Environmental Management Plan permitting, SWMF planting, reforestation calculations, phasing, and certified arborist inspection.

Kate Ireland Parkway on 319 in Leon County:

Rex Shiver Landscaping, Inc.

2005

Landscape Architecture experience performing FDOT Contractor Quarterly Plant and Bed Inspections & Reports.

3/2/2011

**Lake Jackson View Park – Passive Recreation and Multi-Use Park:
Leon County Parks Department
2007**

Landscape Architecture experience producing master plans, permit drawings, construction details and construction administration services. Specific elements of the improvements include mulch trail, amenities, observation boardwalk, canoe launch / dock, playground, parking and irrigation.

**Florida Supreme Court:
Hoy+Stark Architects
2008 - 2009**

Registered Landscape Architecture experience producing landscape & irrigation plans and as-built drawings / report. The scope also included certified arborist consultation services such as tree mitigation reports, risk assessment & evaluation and construction monitoring.

**Florida State University (FSU):
2009 - present**

Registered Landscape Architecture experience with FSU Campus renovations and new construction projects that include landscape plans, irrigation plans, details, certified arborist consultation and construction administration.

List of Projects:

Covered Tennis Facility / Multipurpose Teaching
Parking Garage #6

**Westminster Oaks – Maguire Center for Lifelong Learning:
Westminster Services, Inc.
2009**

Registered Landscape Architecture experience preparing amenity landscape plan, irrigation plan, cost estimates and construction administration. Also produced was a concept sketch and hardscape plan for outdoor dining area.

**NFREC – Outdoor Demonstration Garden & Walking Trail:
North Florida Research & Education Center (NFREC)
2010**

Registered Landscape Architecture experience preparing concept plan, master land-use / pedestrian circulation plans, themed spaces and phasing plans. The gardens will serve as a living laboratory to evaluate new plants and as a living classroom to demonstrate environmentally sound landscaping practices. Trails will integrate pre-existing plantings with planned gardens showcasing plants under study by the NFREC.

**Leon County Operations Center – Phase II:
Johnson Peterson Architects
2010**

Registered Landscape Architecture experience providing a re-vegetation landscape plan and certified arborist consultation services such as tree mitigation reports, risk assessment & evaluation and construction monitoring.

**Westminster Oaks – Pine Laurel Subdivision:
Westminster Services, Inc.
2010 - 2011**

Registered Landscape Architecture experience preparing overall subdivision landscape standards, cost estimates and prototypes. Lot-specific plans were prepared for each home at the time of construction.

GARCIA BRIDGE ENGINEERS, P. A.

ANTONIO M. GARCIA, PE

President

Resume

EDUCATION

BS - Civil Engineering, 1965, University of Florida

MS - Civil Engineering (Structures), 1970, City College of New York

REGISTRATIONS

FL/1971/PE11048

DL/2008/PE 15691

PROFESSIONAL AFFILIATIONS

Post-tensioning Institute (PTI)

Precast/Prestressed Concrete Institute (PCI), Bridge Committee

Florida Engineering Society (FES)

American Society of Civil Engineers (ASCE), Fellow

SUMMARY OF EXPERIENCE

Mr. Garcia has been practicing engineering since 1965 as a structural engineer in both the private and public arena. This experience includes bridges (both of steel and concrete), retaining walls, cut & cover tunnels, port facilities, transit stations and maintenance facilities. Throughout his career, Mr. Garcia has been extensively involved in large, multi-disciplinary projects. While with the Florida Department of Transportation, he served as District Special Projects Director overseeing the construction of the Sunshine Skyway Bridge, as State Structures Design Engineer (Chief Bridge Engineer), he was involved in the design decisions for many of Florida's major bridges such as the Acosta Bridge, Edison Bridge, Howard Frankland, and many others. As of June 30, 2004, he has been President of his own firm, Garcia Bridge Engineers, P.A., with his partner, Dr. Juan J. Goñi.

Work History

From	To	Firm	Duties
Sep 1965	Sep 1969	Hardesty & Hanover, NYC	Junior Engineer to Engineer
Sep 1969	Oct 1975	TAMS, Inc., NYC	Engineer to Sr. Eng., and Proj. Mgr.
Oct 1975	Sep 1982	TAMS, Inc., Boston	Chief Bridge Engineer
Sep 1982	Feb 1983	TAMS, Inc., NYC	Sr. Bridge Engineer
Feb 1983	Sep 1993	FDOT, Tallahassee	Structures VE Engineer, PM Sunshine Skyway Bridge, District Director Sunshine Skyway Bridge, Chief Bridge Engineer.
Sep 1993	Mar 1995	DRC Consultants, NYC	Sr. Vice President
Mar 1995	July 1997	T. Y. Lin, Inc. Tallahassee	DRC was bought out by TYLin, Vice President.
Sep 1997	Aug 1999	PBS&J, Orlando	Senior Engineer
Aug 1999	Apr 2003	DMJM+HARRIS, Inc., Tall	Vice President
May 2003	Jul 2004	Weidlinger Associates, Inc., Tall	Senior Associate
Jul 2004	Present	Garcia Bridge Engineers, P. A., Tallahassee	President

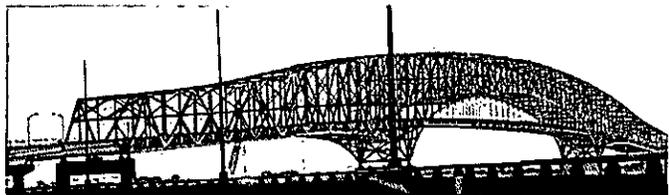
SAMPLE OF MR. GARCIA'S DESIGN PROJECTS IN FLORIDA

Capital Cascade Park (Tallahassee, Florida): Mr. Garcia was intimately involved with the design of 47 cantilevered retaining walls ranging in height from 6 ft. to 27 ft. and in length from 20 ft. to 530 ft. In addition, a series of concrete box culverts were designed ranging in size from 12ft x 8 ft to 8 ft x 3.5 ft. In addition, two signature pedestrian bridges were designed to access a central open air plaza that will accommodate concerts. The project is currently under construction.

Lafayette Heritage Park Pedestrian Bridge (Tallahassee, Florida): Mr. Garcia was involved in the design of a 140 ft. suspension pedestrian bridge spanning over the CSR railroad right of way for the City of Tallahassee Parks Department. Along with the main span, the approach structures constituted a major element of the design. The location has limited access and was designed to allow a contractor to use small erection equipment and limit the damage to the park. The project will go to bid later in 2011.

Hart Bridge (Jacksonville, Florida):

Senior Engineer for the design of strengthening of members of this steel through truss bridge over the St. Johns River. The work was performed as a member of GBE and as a subconsultant to another firm. Reviewed and checked the Load Rating (LRFR according to Florida Guidelines) of this bridge performed by the principal Consultant.



State Road 30 (US 90) Carrabelle Bridge, Carrabelle (FL). Performed Load Rating (LRFR according to Florida Guidelines) of this bridge to evaluate the effects of a new Water Main Pipe to be hung from the underside of the bridge deck.

Big John Monahan Bridge, SR 710 over St. Lucie Canal (Florida): Senior Engineer for the QC of the load rating for this steel girder and floorbeam bridge. The work was performed as a member of GBE and a subconsultant to another firm.

Highland View, US 98 (Florida): After the completion of the Choctawhatchee Bridge, the Highland View bridge was designed by a consultant and reviewed by the FDOT Central Office under my direction. The bridge extended the previous record for a drop-in span from 200 ft. to 250 ft.

Choctawhatchee Bridge, US 331 (Florida): Oversaw the design of the first drop-in girder bridge in the state of Florida. As Chief Structural Engineer for the FDOT, oversaw the in-house team design of the replacement of an existing bascule bridge over the ICWW. The bridge, consisted of the newly developed Florida bulb-tee in four span post-tensioned continuous units with the center section consisting of a three span post-tensioned unit with a center span of 200 ft. The design set the standards to be used in Florida for a number of other drop-in girder structures.



Hall Planning & Engineering, Inc.

RICHARD A. HALL, P.E. **PRESIDENT**

Professional Qualifications

Education

M.S. Transportation Engineering
Virginia Polytechnic Institute, 1971

B.S. Civil Engineering
Virginia Polytechnic Institute, 1970

Employment Record

Hall Planning & Engineering
Transportation Consulting Group
Barr-Dunlop and Associates
Post, Buckley, Schuh & Jernigan
Florida Department of Transportation

Areas of Expertise

Walkable Community Design
Traffic Level of Service Analysis
Traffic Operations Analysis
Public Involvement / Conceptual Design
MPO Planning
DRI / Comprehensive Planning Analysis
Expert Testimony

Professional Activities

Institute of Transportation Engineers
National Society of Professional Engineers
Florida Engineering Society
Congress for the New Urbanism

Registration: Florida (PE #0021458)

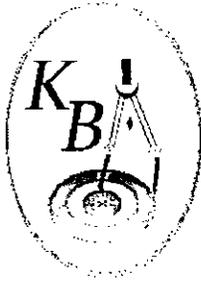
Professional Synopsis

Mr. Richard A. Hall is President of Hall Planning and Engineering (HPE). Firm services and expertise include land use and transportation issues for community design charrettes, public involvement projects, traffic engineering studies, conceptual design studies, growth management analysis, development-related transportation studies, MPO issues, parking and circulation studies, preliminary design studies, and other tasks.

Rick Hall is a practicing, registered transportation engineer dealing with planning, design and regulatory issues in the transportation field. After earning his Bachelor's and Master's degrees in Civil Engineering at Virginia Tech, he worked for the Florida Department of Transportation for eight years. He first served as FDOT's representative to the Miami Urban Area Transportation Study technical committees. Mr. Hall later worked as the Regional Planning Engineer for the urban studies in the Tampa Bay Region and finally was responsible for training and research in urban transportation modeling. His research work initiated the FDOT urban travel modeling process in wide use today.

Since becoming a consultant in 1980, Mr. Hall has worked on a variety of projects including Urban Transportation Plans, Developments of Regional Impact, hurricane evacuation planning, level of service analysis, scenic highway planning and Transportation / Land Use interrelationships. Mr. Hall assisted in the planning of Seaside by performing the Development of Regional Impact traffic element and other parking and traffic analysis. Since then he has participated in over 75 TND charrettes with Dover Kohl & Partners, DPZ and other leading firms performing New Urbanism designs. He is a Knight Community Building Fellow in the initial class of this University of Miami based program. This fellowship produced research in street design for walkable communities with new street classifications serving pedestrian oriented neighborhoods.

Mr. Hall is a member of the Congress for the New Urbanism (CNU) and is part of a team initiating a CNU Street Design Manual. He has served as a visiting professor at Florida State University's Department of Urban and Regional Planning where he taught land use and transportation courses and has also served as President of the Florida Section, Institute of Transportation Engineers.



Resume for
Kim B. Bottomy, P.E., CFM
Senior Project Manager

Professional Credentials

Bachelor of Science, Civil Engineering, Florida State University 1990

Registered Professional Engineer in Florida, Georgia, Alabama

- Federal Highway Administration - Stream Stability and Scour at Highway Bridges
- FDOT WSPRO Water Surface Profile
- Wetland Delineation Methodology - Florida Engineering Society
- Endangered Species Training - FDOT EMO Training
- Water Quality Impact Evaluation - WQIE #0195 - FDOT EMO Training
- FDEP Certified Stormwater Inspector
- ADICPR Advanced Training Stormwater Modeling Software

Professional Affiliations

Association of State Floodplain Managers –

Certified Floodplain Manager (CFM) Certificate # US-09-04540

Deerpoint Lake Reservoir Advisory Committee (Chairman)

(Bay County Appointed position)

Special Qualifications

- Over 20 years of civil engineering experience in stormwater, transportation, and utility design for both private- and public-sector residential, commercial, and industrial projects in northern Florida
- In-depth knowledge of permitting and government controls within Northwest Florida
- Past specializing in the planning and management of project development and environmental (PD&E) studies entailing water quality analysis, location hydraulics, air quality, noise abatement, endangered species, and public involvement processes

Relevant Experience

Prior experience owning and managing surveying and engineering company centered around utility engineering, land development and roadway practice.

Southwood Development – multi phased townhouse development with towncenter, site grading, drainage, utility extensions

Capital Cascade Trail Segments Three and Four: Project Engineer on segments three and four of the renourishment and revitalization of drainage way through Tallahassee and Leon County. Natural looking stormwater pond design, wetland creation, floodplain shelf creations. Pedestrian trails were incorporated into drainage features. This project reduced flood damage, street and nuisance flooding.

FDOT SR20 Resurfacing and Striping - Project engineer on minor resurfacing project for downtown Blountstown. Included restriping and pedestrian access via sidewalks and pedestrian railings.

SR 20 Leon County- Blountstown Highway PD&E Study, FDOT District Three — Project Manager responsible for PDE- Project Development and Environmental study for five miles of SR 20 in Leon County. Coordinated with local Leon County and City of Tallahassee officials and community partners for four laning alternatives analysis. Prepared preliminary design drawings for alternatives including pavement and striping configuration layouts.

Breakfast Point DRI- Project Manager for large mixed use development in Bay County Florida. Development of Regional Impact Study application to DCA for review. Growth Management Services for reviewing DCA comments and responding/negotiating Final Agreements.

SR 77 from Southport to Washington County Line , assisted in the design and preparation of Roadway Construction Plans resurfacing and culvert crossing upgrades of SR 77.

SR 187 from SR 10 to Paxton FDOT resurfacing project. Engineer for design and pavement marking plans of resurfacing project with ADA upgrades and pedestrian crossings.

SR 71 north from Wewahitchka to White City Bridge resurfacing project with culvert upgrades, included milling and resurfacing of existing surface and upgrade to Three R standards with passing zone study. Striping and channelization upgrade.

Northwest Florida Water Management District General Consultant -- Project Manager for ERP permitting program newly adopted in Northwest Florida. Permit reviews and implementation of program and facilities.

Publix Supermarkets, Santa Rosa Beach, Walton County, FL -- Project Manager and engineer of record for 11 acre commercial site with anchor store and multi retail side parcels. Project involved wetland jurisdictional permitting and piping of main ditch system through site. Permitting through Walton County, FDOT, NFWFMD, and FDEP. Project Manager for Signalization Traffic Plans and Traffic Generation report. Design of County Roadway extension into property along with urban section design and striping plans. Included turn lane design and striping.

Beckrich Roadway Extension, Panama City Beach, FL — Project manager for extension of Beckrich Road in Panama City Beach, Florida. Beckrich Road extension entailed upgrading an existing urban two-lane section into a four-lane urban section and the extension of 1,500 feet of new roadway, in addition to the extension of water main, sewer force main and new 300 gpm lift station. Project included traffic studies for capacity generation for surrounding area, signing and pavement markings, school zone markings and pedestrian striping.

FEMA Temporary Housing, Hurricane Ivan, Escambia County, FL — Engineer of record for temporary housing sites located in Pensacola. The sites were set up for local residents whose homes were damaged by Hurricane Ivan. Permitting, design, and construction were completed within an accelerated schedule for six different sites in a four week design-permitting phase period. Included signing and pavement markings for community roadways, FDOT permitting onto State Highway, as well as Traffic Engineering Study Report for FDOT Drive way Connection, Left and Right Turn lane analysis.

Waukeenah Subdivision, Jefferson County, FL — Project manager for 377-acre development, 204-1 acre lots. Project site has unique drainage features involving an onsite manmade dammed lake and significant sloped terrain. This site was permitted through the Suwannee River Water Management District's ERP process. Roadway horizontal and vertical curvature design in sloped terrain. Signing and pavement marking for intersection onto county roadway and interior roadways.

APPENDIX C
WBE/MBE CERTIFICATIONS

Leon County Board of County Commissioners
Minority, Women & Small Business Enterprise Division

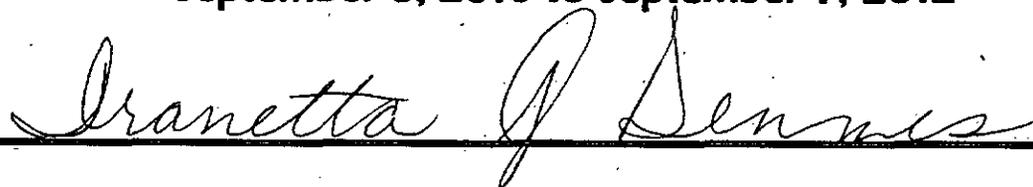
Certifies that
Garcia Brothers Engineers, P.A.

is recognized as a
Small Business Enterprise

Under the Leon County
Purchasing, Minority, Women & Small Business Enterprise Policy 96-1

For a period of two (2) years beginning:

September 8, 2010 to September 7, 2012



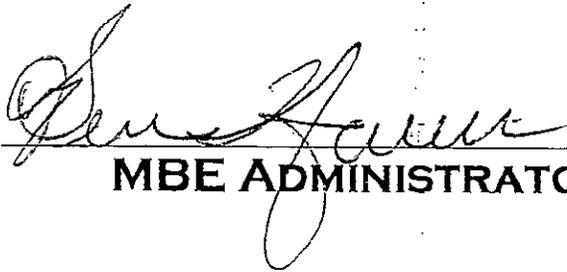
Iranetta J. Dennis, Leon County M/WSBE Director



This certifies that
KB ENGINEERING, LLC

is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:
JULY 13, 2010 TO JULY 31, 2011



MBE ADMINISTRATOR



CERTIFICATION SPECIALIST



State of Florida
*Minority, Women &
Service-Disabled Veteran*
Business Certification

Angie Brewer & Associates, L.C.

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

07/28/2009 to 07/28/2011

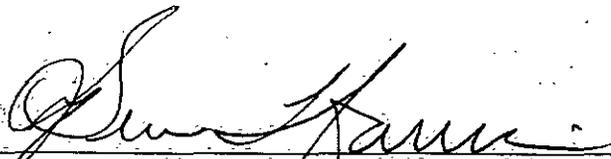
Linda H. South, Secretary

Florida Department of Management Services
Office of Supplier Diversity

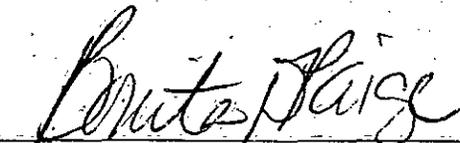


This certifies that
**ENVIRONMENTAL AND GEOTECHNICAL
SPECIALTIES, INCORPORATED**
is recognized as a
Minority/Women-Owned Business Enterprise
under the
**City of Tallahassee and Leon County
Consortium Interlocal Agreement**

For a period of one (1) year beginning:
May 18, 2010 to May 31, 2011



MBE Administrator



Certification Specialist



State of Florida
*Minority, Women &
Service-Disabled Veteran*
Business Certification

Archaeological Consultants, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

February 5, 2010 to February 5, 2012

Torey Alston, Executive Director

*Florida Department of Management Services
Office of Supplier Diversity*

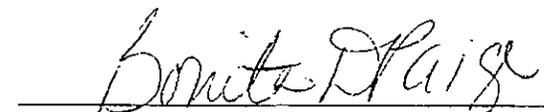


This certifies that
ARCHAEOLOGICAL CONSULTANTS, INC.
is recognized as a
Minority/Women-Owned Business Enterprise
under the
City of Tallahassee and Leon County
Consortium Interlocal Agreement

For a period of one (1) year beginning:
March 5, 2010 to March 31, 2011



MBE Administrator



Certification Specialist