**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.

MACTEC Engineering and Consulting, Inc.
(Firm Name)

BY _____
(Authorized Representative)

Eric Blomberg, PG
(Printed or Typed Name)

ADDRESS 2533 Greer Road, Suite 6

CITY, STATE, ZIP Tallahassee, Florida 32308

TELEPHONE 850.656.1293

FAX 850.656.3386

**ADDENDA ACKNOWLEDGMENTS: (IF APPLICABLE)**

Addendum #1 dated 03/03/11 Initials _____ Addendum #3 dated _____ Initials _____

Addendum #2 dated 03/08/11 Initials _____ Addendum #4 dated _____ Initials _____

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

____ a. Stormwater Engineering
____ b. Roadway Design
____ c. Traffic and Intersection Engineering
____ d. Structural Engineering
____ e. Geotechnical Services
✓ f. Environmental Support Services
____ g. Construction Engineering and Inspection Services
____ h. Surveying
____ i. Subdivision and Site Development Engineering
✓ j. Parks and Recreational Facility Engineering
____ k. Utility Engineering

*Request for Proposals for*

# Civil Engineering Services, Continuing Supply

Proposal Number: BC-03-17-11-25

**March 17, 2011**

*Submitted to:*

Leon County
Board of County Commissioners
301 South Monroe Street, Tallahassee, Florida 32301

**Submitted by:**

MACTEC Engineering and Consulting, Inc.
2533 Greer Road, Suite 6
Tallahassee, Florida 32308
Phone: 850-656-1293 ❖ Fax: 850-656-3386

*www.mactec.com*

# A. CONTRACTOR INFORMATION

Since its beginning in 1946, MACTEC Engineering and Consulting, Inc. (MACTEC) has evolved into a leading engineering and design, environmental, and construction services firm that emphasizes technical excellence with personal service from a local office. The company employs 2,800 staff in over 72 office locations throughout the United States. Revenues place MACTEC at 29th among Engineering News-Record's Top 500 Design Firms and at 30th among the Top 200 Environmental Firms nationwide. MACTEC has nine Florida offices, with approximately 400 employees statewide.

Environmental, infrastructure, and engineering services for Environmental Support Services and Parks and Recreational Facility Engin eering for the continuing Supply Agreement in Leon County Proposal Number BC-03-17-11-25 will be managed from our Tallahassee, Florida office.

*Local Business Address:*

**MACTEC Engineering and Consulting, Inc.**
**Mr. Eric Blomberg, PG**, *Office Manager*

2533 Greer Road, Suite 6
Tallahassee, Florida 32308

Phone: (850) 656 – 1293
FAX: (850) 656 – 3386
Email: *eablomberg@mactec.com*

This submittal is not a Joint Venture.

# B. EXECUTIVE SUMMARY

MACTEC

**CORPORATE PROFILE**

- Founded in 1946
- 3000+ employees
- 80 offices nationwide
- Ranked among the top firms in ENR

3,000 professionals – Engineers, scientists, landscape architects, planners, quality auditors, technicians, and support staff provide consistent, cost effective, and risk-managed strategies to clients of every size, no matter the location. MACTEC's experience spans a wide array of clients including national, state and local governments; multinational and regional companies; a number of Fortune 100 companies; and financial institutions.

***Florida Resources***

In Florida, our staff of over 400 associates provides services throughout the state from 9 strategically located Florida offices. With offices in Tallahassee, Gainesville, Jacksonville, Orlando, Miami, Naples, Tampa, West Palm Beach and Pensacola, our Florida statewide presence makes every project in Florida a "local" project for MACTEC. All Florida offices report to a regional manager in Miami, who manages MACTEC's Florida offices. This structure promotes and facilitates the ease with which the Florida offices and personnel work together.

For the FDEP, MACTEC Tallahassee has continuously provided consulting services for over 26 years. Under multiple contracts, MACTEC is currently providing services to the FDEP Office of Greenways and Trails, the Division of Waste Management, the Division of State Lands, and the Division of Recreation and Parks.

**Project Office**
2533 Greer Road, Suite 6
Tallahassee, Florida 32308
PH: 850.656.1293
FAX: 850.656.3386

## *Company Background*

Since its beginning in 1946, MACTEC Engineering and Consulting, Inc. (MACTEC) has evolved into a leading engineering, design, consulting, environmental, and construction services firm by emphasizing technical excellence with personal service from a local office. Through strategic acquisitions, the company has grown to more than 3,000 employees and 80 offices in over 30 states. MACTEC in now a $500 million firm with corporate headquarters located in Atlanta, Georgia (*www.mactec.com*).

The firm's broad array of engineering, scientific and technical disciplines provides a full range of services to over 8,000 public and private sector clients. Today, the MACTEC organization has four operating units: MACTEC Engineering and Consulting, MACTEC Facilities Design, MACTEC Development Corporation, and MACTEC Federal Programs.

MACTEC supports clients in accomplishing their business objectives by providing innovative solutions using unmatched expertise, up-to-the-minute technology, and uncompromising integrity. From concept to construction, compliance to cost management, MACTEC is distinctively qualified to help clients meet the demands of today's complex planning, environmental, and engineering projects. MACTEC delivers value by providing the best possible solutions and support *on schedule, in budget, and within quality and regulatory guidelines.* In the consulting industry, real value never comes from cutting corners that will add cost in the long run; rather, it comes from an unwavering commitment to quality, efficiency, excellence, and the success of our clients.

For more than six decades, MACTEC has been committed to delivering technical excellence and quality on our projects with personal service from a local office. While we remain steadfast to these principles, MACTEC's strategy is to respond to the complex global issues impacting the environment and the world in which we live. From *Planning* thru *Design* thru *Implementation* and *Verification*, MACTEC's sustainable solutions leverage our expertise across six key resource areas (land, air, energy, water, ecosystems and materials) where actions of our clients can impact sustainability and provide triple bottom line benefits to all stakeholders.

- Environmental – minimizing impacts to the environment
- Economical – improving long-term profitability and achieving greater efficiency
- Societal- meeting the needs of our clients, shareholders and public in today's energy and carbon-constrained world.

MACTEC is an experienced provider of recreational and park facility designs for projects of all sizes. MACTEC's recreational design staff is thoroughly experienced in all aspects of designing recreation facilities including developing site utilities that match the needs and available resources of each park location. MACTEC's recreational design staff has been recognized with more than 25 professional planning and design awards. They have worked together on many projects and have the range of experience in park planning, design and cost estimating to thoroughly understand the technical, regulatory and political complexities of the proposed park development.

MACTEC is also a national leader in site assessment and remediation services because of our solutions-oriented approach. We understand our clients' goals and direct our energies toward attaining a solution that achieves these goals during every phase of project execution. MACTEC staff are highly knowledgeable of current State and Federal procedures from years of project execution in Florida and uses this experience to work closely with our clients to identify the most cost-effective solutions to environmental concerns. Our capabilities include:

## RELEVANT "IN-HOUSE" SERVICES for Work Catorgories:

*Parks and Recreational Facility Engineering and Environmental Support Services*

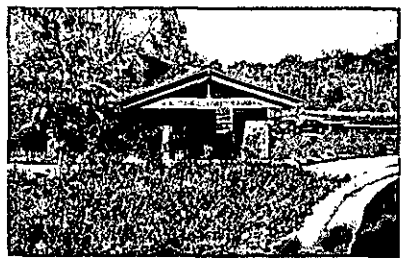
### Program Management Services
- Strategic Planning
- Communications, Outreach, and Public Education
- Regulatory Review and Revision

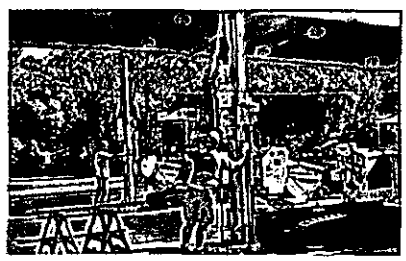
### Planning and Urban Design
- Comprehensive Planning
- Neighborhood Plans
- Redevelopment Plans
- Demographic Analysis
- Surveys
- Citizen Participation
- Land Use Forecasting
- GIS/Database Management
- Historic Preservation
- Grant Writing
- Zoning/Development Regulations

### Landscape Architecture
- Parks and Recreation System Planning
- Site Master Planning
- Sports Facility Design
- Trail Design
- Greenspace/ Open Space Planning
- Tree Save/Tree Replacement Plans
- Streetscape/Corridor Plans
- Site Suitability Evaluation
- Campus Planning
- Design Guidelines
- Downtown Revitalization

### Pre-Design Services
- Due Diligence
- Property Condition Surveys
- Phase I & II Env. Site Assessments
- Drilling and Subsurface Testing/Exploration
- Surveying
- Traffic Studies
- Computer Design, Modeling and Drafting

### Environmental Services
- Air Quality





### Environmental Services—cont'd
- Environmental Assessments
- Compliance and Permitting
- Indoor Air Quality
- Industrial Hygiene/Occupational Health
- Geology/Hydrogeology
- Pollution Prevention
- Restoration/Remediation
- Risk Assessment
- Ecologic Studies
- Natural Resource Studies
- Cultural Resource Studies
- Threatened/Endangered Species
- Wetlands Delineation
- Waste Management
- Water Resources/Water Quality
- Regulatory Agency Negotiation

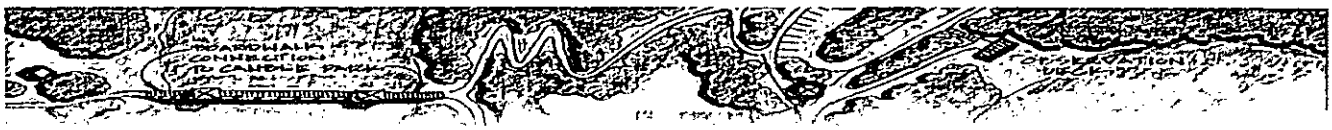
### Site/Civil Design
- Site Planning/Layout Grading Plans
- Utility Evaluation and Design
- Sediment and Erosion Control Plans
- Park and Trail Design
- Roadway Design
- Right-of-Way Studies
- Bridge Structures and Design
- Zoning and Permitting Services
- Cost Estimating
- Terrain and Subsurface Modeling
- Stormwater Management and Drainage Design
- Hydrology / Watershed Modeling
- Pavement Management

### Additional Engineering Services
- Facilities Engineering and O&M
- Industrial Engineering and Testing
- Geotechnical Engineering
- Transportation Engineering
- Value Engineering /Analysis
- Structural, Mechanical, Electrical, and Chemical Engineering
- Construction Engineering Inspection
- Construction Materials Testing

This RFP is submitted in good faith without collusion or fraud. I am authorized to make representations on behalf of MACTEC and able to commit all resources as necessary to meet the needs of a resulting contract.

Eric Blomberg, PG
Tallahassee Office Manager

MACTEC



## C. REQUIRED FORMS

*Affidavit Certification Immigration Laws*

*Equal Employment Policies*

*Insurance Certification Form*

*Certification Regarding Debarment*

*Suspension, And Other Responsibility Matters Primary Covered Transactions*

*Local Vendor Certification*

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## 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: MACTEC ENGINEERING AND CONSULTING, INC.

Signature: _____ Title: Office Manager

STATE OF Florida
COUNTY OF Leon

Sworn to and subscribed before me this 15th day of March, 2011.

Personally known ✓

Lois A. Kaminski
NOTARY PUBLIC

OR Produced identification _____

Notary Public - State of Florida

_____
(Type of identification)

My commission expires: Jan. 11, 2015

LOIS A. KAMINSKI
MY COMMISSION # EE 054247
EXPIRES: January 11, 2015
Bonded Thru Notary Public Underwriters

Lois A. Kaminski
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: Office Manager

Firm: MACTEC Engineering and Consulting, Inc.

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## 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: | XV |
| Business Auto: | Indicate Best Rating: | A+ |
| | Indicate Best Financial Classification: | XV |
| Professional Liability: | Indicate Best Rating: | A |
| | Indicate Best Financial Classification: | XV |

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.

**RFP Title: Request for Proposals for Civil Engineering Services, Continuing Supply**
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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 Shelley C. Taylor-Blair
Typed or Printed

Signature _____

Date 03/15/11

Title Account Executive/Assistant Vice President
(Company Risk Manager or Manager with Risk Authority)

Wells Fargo Insurance Services, Inc.
Agent for: MACTEC Engineering & Consulting, Inc.

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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 statues 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

Office Manager

Title

MACTEC Engineering and Consulting, Inc.

Contractor/Firm

2533 Greer Road, Suite 6, Tallahassee, Florida 32308

Address

## LOCAL VENDOR CERTIFICATION

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

a) Has had a fixed office or distribution point located in and having a street address within Leon, Gadsden, Wakulla, or Jefferson County for at least six (6) months immediately prior to the issuance of the request for competitive bids or request for proposals by the County; and

b) Holds any business license required by Leon County (or one of the other local counties), and, if applicable, the City of Tallahassee; and

c) Is the principal offeror who is a single offeror; a business which is the prime contractor and not a subcontractor; or a partner or joint venturer submitting an offer in conjunction with other businesses.

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

| | |
|---|---|
| Business Name: MACTEC Engineering and Consulting, Inc. | |
| Current Local Address: 2533 Greer Road, Suite 6 Tallahassee, FL 32308 | Phone: 850.656.1293 Fax: 850.656.3386 |
| If the above address has been for less than six months, please provide the prior address. Length of time at this address: | |
| Home Office Address: Alpharetta GA | Phone: Fax: |

Signature of Authorized Representative — Date: 3.15.11

STATE OF Florida
COUNTY OF Leon

The foregoing instrument was acknowledged before me this 15th day of March, 2011.

By Eric Blomberg, of MACTEC Engineering and Consulting Inc.
(Name of officer or agent, title of office 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)

or has produced _____ as identification.
(type of identification)

Lois A. Kaminski
Signature of Notary

LOIS A. KAMINSKI
MY COMMISSION # EE 054247
EXPIRES: January 11, 2015
Bonded Thru Notary Public Underwriters

Print, Type or Stamp Name of Notary

Title or Rank

Serial Number, If Any

**Return Completed form with supporting documents to:**

**Leon County Purchasing Division**
**1800-3 Blair Stone Road**
**Tallahassee, Florida 32308**

# ENVIRONMENTAL SUPPORT SERVICES

## A. Ability of Professional Personnel

Leon County is requiring the services of a firm that can supply comprehensive environmental consulting services in support of the County's programs for hazardous materials management, air and water quality protection and monitoring, land conservation, asbestos abatement, natural resources protection, development review and other regulatory initiatives. The work will be assigned on a task assignment basis. There is no guarantee of a specific level of effort, nor the specific types of specialists within the broad field of environmental consulting that the County may require. Consequently, the County requires the support of a diverse firm that can expertly address a wide range of environmental issues. MACTEC offers a diverse skill set of environmental professionals from our office in Leon County, with supplementary specialists available in additional Florida and southeastern U.S. locations.

MACTEC has all of the in-house expertise and technical resources to exceed the requirements of this contract. Every discipline required to successfully execute a wide variety of environmental support services is available within MACTEC. Our diversified staff, which comprises specialists in over 50 scientific and engineering disciplines, builds and leads highly successful project teams that are dedicated to common goals. This wide range of in-house capabilities is an ideal match for the proposed task assignment contract, allowing Leon County staff to access virtually any engineering or scientific service without the costs and delays associated with adding specialized subcontractors.

Our expert staff brings in-depth technical knowledge and comprehensive field experience, thus eliminating the inefficiencies and costly learning curves of less-experienced engineering consulting firms or subcontractors. Key to our success is our ability to provide an integrated approach involving teams of experienced engineers, scientists, and technical staff who can deal successfully with every phase of a project life-cycle, from planning through design, permitting and construction management. Our ability to fully understand the requirements of a Contact of this scope is directly related to MACTEC's experience in conducting every discipline required to succeed from engineering design to permitting to coordination with all of the project "stakeholders".

Our proposed organizational structure is shown on the attached Organization Chart. MACTEC's designated project office for this Contract is our Tallahassee office. The primary liaison for this contract is MACTEC's Project Manager, Mr. Eric Blomberg, PG. Mr. Blomberg has more than 2 decades of experience in all aspects of conducting site assessment and remediation projects. As Project Manager Mr. Blomberg will be responsible for MACTEC meeting all of the contract goals for technical quality as well as for meeting all financial and schedule commitments.

MACTEC has provided on an Organizational Chart key discipline leaders for the technical disciplines. The technical discipline leaders will be supported by a resource pool of over 400 Florida-based, experienced engineers, scientists, and technicians with the expertise to provide the services needed for the successful design and development of parks and recreational facilities. In addition, these staff will be supported by MACTEC's in-house support services including surveying, laboratories, drilling, field-testing, material testing and state-of-the-art data management capabilities. Finally, our Florida resources are backed by another 2,600 engineers, scientists, technicians and support staff located in MACTEC's 80 other offices. Through our integrated organizational structure, our Discipline leaders have the ability to draw upon the resources of any service group to provide solutions specifically tailored to meet the unique needs of any aspect of this project, whether it's across town or across the country. Resumes for these discipline leaders have been provided at the end of this section.

## MACTEC Team Availability Matrix

| Key Project Personnel | Project Assignment | Years Experience | Availability (per year) | |
|---|---|---|---|---|
| | | | Percent of Time | Hours Available |
| Eric Blomberg, PG | Project Manager | 24 | 60 | 1,200 |
| Jack Davis | Technical Review / Health and Safety | 32 | 20 | 400 |
| Jim Horton, PE | Quality Assurance / Quality Control | 39 | 30 | 600 |
| Ron White, PG | Site Assessment / Phase I & II ESA | 21 | 60 | 1,200 |
| Bill Waites, PG | Site Assessment / Phase I & II ESA | 13 | 60 | 1,200 |
| Angela Finney | Site Assessment / Phase I & II ESA | 21 | 40 | 800 |
| Cory Vowles | Site Assessment / Phase I & II ESA | 5 | 30 | 600 |
| Harry Hooper | Site Assessment / Phase I & II ESA | 38 | 40 | 800 |
| Jason Burkett | Site Assessment / Phase I & II ESA | 15 | 50 | 1,000 |
| Mark Uanino | Site Assessment / Phase I & II ESA | 9 | 40 | 800 |
| Dusty Tarver | Site Assessment / Phase I & II ESA | 18 | 50 | 1,000 |
| Pat Craine | Site Assessment / Phase I & II ESA | 26 | 40 | 800 |
| Geoff Schaefer, PE | Remedial Action Plans / Engineering Design | 16 | 50 | 1,000 |
| Narayanan Raghupathi, PE | Remedial Action Plans / Engineering Design | 9 | 50 | 1,000 |
| Russell Stauffer, PE, LEED, AP | Asbestos, Lead-Based Paint / Indoor Air Quality | 49 | 40 | 800 |
| Jim Marsh | Asbestos, Lead-Based Paint / Indoor Air Quality | 26 | 30 | 600 |
| Harry Hooper | Asbestos, Lead-Based Paint / Indoor Air Quality | 38 | 30 | 600 |
| Cory Vowles | Asbestos, Lead-Based Paint / Indoor Air Quality | 5 | 50 | 1,000 |
| Narayanan Raghupathi, PE | Operation and Maintenance/Landfill Monitoring | 9 | 50 | 1,000 |
| Richard White | Operation and Maintenance/Landfill Monitoring | 26 | 40 | 800 |
| Ann Shortelle, PhD | Surface Water Quality | 27 | 40 | 800 |
| Bill Tucker, PhD | Surface Water Quality | 37 | 40 | 800 |
| Vanessa Crisler | Plans Production | 12 | 50 | 1,000 |
| George Burton | Plans Production | 28 | 50 | 1,000 |

## *Subcontractors*

MACTEC is committed to provide the greatest participation possible for minority business enterprises (MBE) to compete as suppliers for MACTEC's current and long-term requirements. To assist Florida's small and minority businesses in doing business with County, City and the State of Florida and the private sector, MACTEC makes its best effort, whenever possible, to utilize MBEs through subcontracting, mentoring and direct award of goods and services. MACTEC extends fair opportunity for participation to MBEs consistent with applicable State of Florida regulations, Leon County policies, MACTEC policies and practices, and MACTEC's technical obligations under the contract. It is MACTEC's policy when price, quality, delivery, and

other pertinent factors are evaluated as equal; the order should and is expected to be awarded to the MBE. In addition, MACTEC shall, whenever possible, assist in the training and development of MBE's in both the private and public sectors.

For outreach, MACTEC has accomplished and plans to continue to:

- Assist MBEs in understanding and meeting contracting needs, by providing training, mentoring attending conferences, and seminars.
- Obtain the County directory of MBEs capable of providing services and distribute this directory to all employees involved in the procurement process.
- Develop promotional campaigns to inform the MBE of the contract opportunities and its commitment to involve such firms in its contracting activities.
- Develop/attend special events to meet special needs or concerns including contracting trade fairs, open houses, workshops, business socials.
- Target appropriate firms for participation in the training effort, provide mentoring to appropriate firms to teach MBEs the nuances of doing business with MACTEC.
- Coordinate events with applicable governmental entities and private/nonprofit organizations to meet MBEs and to develop business relationships.
- Continue working with FSU, FAMU and TCC to support minority student involvement in engineering and science disciplines.

MACTEC will continue its commitment to MBEs for this Contract with Leon County. Minority business enterprise specialty subcontractors that we have worked with in the past, are currently registered in our procurement system and will be called upon to participate are:

**Environmental and Geotechnical Specialist, Inc.** EGS is an M/WBE firm from Tallahassee that will provide geotechnical and environmental drilling and environmental permitting services.

**Florida Environmental and Land Services, Inc.** FLES is an M/WBE firm from Tallahassee that will provide weltands and environmental permitting services.

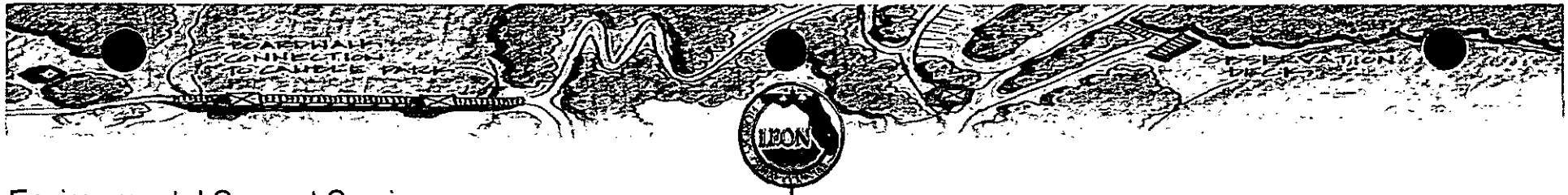
**Archeological Consultants, Inc.** Archeological Consultants Inc. is an M/WBE firm from Crawfordville that will provide archeological and cultural resources assessment services that may be needed for a project.

**CS&K Consultants, Inc.** CS&K is an M/WBE firm from Tallahassee that will provide environmental consulting services including landfill monitoring and water quality monitoring.

**Intranet Lab services, LLLP.** Intranet is a broker of laboratory services and is an M/WBE firm located in Tallahassee.

Our approach to utilization of subcontractors is to fully integrate them into our project teams. We assign them specific tasks that are appropriate to their areas of expertise, allowing them to make meaningful contributions to the overall success of the project.

We have also teamed with other subcontractors to provide a full spectrum of environmental services including drilling, remediation, surveying, laboratory, equipment, hazardous materials disposal. These subcontractors and their locations are presented on the organization chart located in this section.




# Environmental Support Services

**MACTEC Project Manager**
**Eric Blomberg, PG**

**Technical Review / Health and Safety**
Jack Davis

**Quality Assurance / Quality Control**
Jim Horton, PE

**Site Assessment / Phase I & II ESA**
Ron White, PG
Bill Waites, PG
Angela Finney
Cory Vowles
Harry Hooper
Jason Burkett
Mark Uanino
Dusty Tarver
Pat Craine

**Remedial Action Plans / Engineering Design**
Geoff Schaefer, PE
Narayanan Raghupathi, PE

**Asbestos, Lead-Based Paint / Indoor Air Quality**
Russ Stauffer, PE, LEED, AP
Jim Marsh
Harry Hooper
Cory Vowles

**Operation & Maintenance / Landfill Monitoring**
Narayanan Raghupathi, PE
Richard White
Paul Hutchinson

**Surface Water Quality**
Ann Shortelle, PhD
Bill Tucker, PhD

**CADD / GIS**
George Burton
Vanessa Crisler

**MACTEC In-House Services**
Survey – DPT Rig/Drill Rigs –
Toxicology Laboratory – Pilot Testing
Subsurface Utility Locate

**Subcontractor Team**

| Drillers/DPT | Survey | Laboratory | Landfill Monitoring | Hazardous. Materials/ IDW Disposal |
|---|---|---|---|---|
| EGS *– *Tallahassee*<br>Huss Drilling – *Bonifay* | Southeastern Surveying – *Chipley, Ocala* | Test America – *Tallahassee*<br>IntraNet * – *Tallahassee* | CS&K Associates, Inc. *- *Tallahassee* | Soil Remediation, Inc. – *Ray City, GA* |
| **Remediation** | **Equipment Repair and O&M** | **Archeological/Cultural Resources Assessments** | **Water Quality Monitoring** | **Wetlands, Permitting** |
| Big Bend Environmental Srvs – *Tallahassee* | Equipment Technologies, Inc. - *Tallahassee* | Archeological Consultants, Inc. * – *Crawfordville* | CS&K Associates, Inc. * - *Tallahassee* | EGS * – *Tallahassee*<br>Florida Env and Land Svcs *– *Tallahassee* |

* MBE Business Certified

MACTEC

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| **Eric A. Blomberg, PG** | **Project Manager** | **a. Total 24** | **b. Current Firm 23** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
Master of Science, Hydrogeology, Georgia Institute of Technology, 1988 Bachelor of Science, Geological Engineering, Colorado School of Mines, 1985

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Professional Geologist, FL, # PG 1695
Professional Geologist, AL, # PG 1219
Professional Geologist, GA, #PG000846

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Mr. Blomberg is a principal hydrogeologist with two decades of experience. He has been part of the project management team for several multimillion dollar RI/FS projects which include contamination investigation, design, and construction. His areas of expertise include program, project and technical management, geology, hydrogeology, and geologic engineering. His work experience includes remedial investigations (RI) and feasibility studies (FS), Resource Conservation and Recovery Act (RCRA) facility investigations (RFI), site inspections (SI), contamination assessments, environmental site assessments, site assessments, field investigations, data evaluation, workplan and report writing and review, groundwater, surface water, sediment and soil sampling, aquifer characterization, soil gas and geophysical surveys, gas chromatography, and costing and implementation of field operations. Mr. Blomberg's field investigations have covered landfills, industrial sites, underground and aboveground petroleum storage tanks (USTs and ASTs), jet fuel pipelines, gasoline stations, Navy bases, Air Force bases, and National Priority List (NPL) Superfund sites.

### 19. RELEVANT PROJECTS

**a**

(1) TITLE AND LOCATION *(City and State)*: **FDEP - Drycleaning Solvent and Hazardous Waste Site Cleanup Program, Various Locations, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Geologist / Hydrologist:** Conducted hazardous waste and solvent cleanup and remediation services at dry cleaning business sites. Services included environmental and contamination assessments (soil, soil gas and groundwater sampling and analysis); monitoring well installation; recommendation of remediation technology; remedial design, development and testing; system operation and maintenance; and project documentation. Responsible for providing project and technical leadership for several sites, performing assessments utilizing rotosonic drilling techniques to rapidly collect lithologic samples, install monitoring wells, and minimize the investigative derived waste. **Fees: $8,000,000**

**b**

(1) TITLE AND LOCATION *(City and State)*: **Florida Department of Environmental Protection (FDEP), Petroleum Pre-Approval Program Environmental Services, Miscellaneous Locations, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Project Manager:** Environmental services at over 400 petroleum sites statewide with a total value of over $80 million in contract fees, using innovative assessment and remediation techniques including direct push rigs for rapidly assessing the extent of soil and groundwater contamination, a fuel fluorescence detector for free product delineation, a cone penetrometer for rapidly identifying lithology and installing micro-wells, dual-phase extraction of soil gas and groundwater, low-flow biosparging with 800-foot horizontal wells, bioremediation of contaminated groundwater, natural attenuation of groundwater, using large-diameter augers to remove petroleum contaminated soil, and chemical injection. Responsible for managing the scope, schedule, and budget of numerous projects valued at over $10 million in fees; provided technical leadership for over 50 petroleum sites. **Fees: $26,017,930**

**c**

(1) TITLE AND LOCATION *(City and State)*: **FDEP - Pre-Approval Program, Metro Shell Station Remediation System Design and Construction, Tallahassee,, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2006 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Project Manager.** Installation of soil and groundwater remediation system for petroleum contamination at site of service station in an urban setting. Soil vapor extraction system installed to treat vadose zone soil contamination; horizontal well biosparge system installed to treat groundwater contamination. Responsible for the management and technical direction of the design and installation of a $600,000 soil and groundwater remediation system. Included the installation of two horizontal biosparge wells which were 1,300-feet-long and 70-feet-deep, and a soil vapor extraction system. **Fees: $750,000**

**d**

(1) TITLE AND LOCATION *(City and State)*: **FDEP - Suwannee County Public Works Department Site Contamination Removal, Live Oak, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2004 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Project Manager:** Source removal of free product and petroleum-contaminated soil using large-diameter augers to depth of 75 feet below land surface at site operated by local Public Works agency. Services included well sampling and abandonment, site restoration, monitoring, injection well installation and groundwater treatment. Removed and disposed of over 50,000 tons of soil and 60,000 equivalent gallons of free product. Responsible for the management and technical direction of a $5.2 million soil excavation using large-diameter augers to a depth of 75-feet-below land surface; conducted 578-feet-diameter auger borings to remove over 40,000 tons of petroleum contaminated soil. **Fees: $5,200,000**

**e**

(1) TITLE AND LOCATION *(City and State)*: **FDEP - Pre-Approval Program, Walker's General Store Soil Vapor Extraction (SVE) Well Installation, Wacissa, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Principal Hydrogeologist:** Installation of horizontal and vertical soil vapor extraction (SVE) wells, and installation of Internal Combustion Engine (ICE) and services for system startup, at environmentally impacted site of rural service station that previously experienced free product contamination from leaking underground storage tanks (USTs), with resulting plume extending across 11.4-acre area and more than 100 feet in depth, impacting the Floridan aquifer and several area domestic water wells. SVE well system and ICE to continue ongoing groundwater recovery and treatment effort. Responsible for overall technical direction for the cleanup of the site and client relations. **Fees: $94,410**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Jack Davis** | **Technical Review / Health & Safety** | **32** | **23** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
Master of Public Health, Environmental & Industrial Health, University of Michigan, 1979
BS, Biology, Baldwin Wallace College, 1974

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
NA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Mr. Davis has experience in planning and managing environmental investigations for state, federal and private clients. This experience includes conducting Phase I and II environmental site assessments and environmental investigations for a variety of clients; evaluating hazardous waste generation, storage and disposal practices; conducting industrial hygiene studies; and developing health and safety plans for work on hazardous waste sites. Currently, Mr. Davis is the contract manager for MACTEC's Environmental Site Assessment contract and Conservation Easement Monitoring Contract with the Division of State Lands, Florida Department of Environmental (FDEP). In addition, Mr. Davis also manages numerous site assessment and site remediation projects under the FDEP petroleum contaminated site cleanup program.

## 19. RELEVANT PROJECTS

**a.**
(1) TITLE AND LOCATION *(City and State)*: **Florida Department of Environmental Protection (FDEP), Bureau of Design and Construction, Various locations, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2013 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Duties include establishing and managing project budgets, schedules and technical scopes for work conducted under Contracts DC482, DC755 and DC803; review of deliverables and interfacing with client contacts. Services include providing engineering design and assessment services for a variety of projects located in various State parks in Florida. Projects include geotechnical investigations at Delnor-Wiggins State Park; design of a boat ramp and associated parking at Terra Ceia and the design and development of an ADA compliant trail at Falling Waters State Park. **Fees: $3,000,000**

**b.**
(1) TITLE AND LOCATION *(City and State)*: **FDEP Bureau of Land Acquisition, Environmental Site Assessments and Observations, Various Sites throughout Florida**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2005 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Contract Manager –** Responsible as Contract Manager for meeting with the client, developing project scopes, managing personnel to conduct field site assessments, and preparing final deliverables; also responsible as Project Manager for overseeing activities for all project sites. Services include environmental site assessments, soil screening, groundwater sampling and analysis, monitoring well installations, asbestos and lead-based paint surveys, surface/subsurface geophysics, data collection / analysis and cost estimating. **Fees: $3,000,000**

**c.**
(1) TITLE AND LOCATION *(City and State)*: **City of Tallahassee, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: On-Going — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Responsible for interfacing with City staff; developing project budgets, schedules and scopes of services and managing project professionals during project execution and providing principal review of all deliverables. MACTEC is currently providing design, planning and engineering services to the City of Tallahassee for various trials and trailhead projects. The Tallahassee Junction Park Conceptual Plan project consisted of the preparation of a conceptual plan for the Tallahassee Junction Park and trailhead. Fern Trail Underpass project involved preparing a feasibility study for a trail underpass under FDOT Capital Circle Bridge on CSX railroad right of way. **Fees: $52,000**

**d.**
(1) TITLE AND LOCATION *(City and State)*: **FDEP, Munson Nursery Source Removal, Munson, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2009 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Under FDEP Petroleum Cleanup program, implemented source removal plan developed by MACTEC. Approximately 1250 tons of petroleum contaminated soil were excavated and disposed of from a Florida Division of Forestry nursery site. Due to abnormal rain event, approximately 30,000 gallons of rainwater that collected in the excavation required treatment through carbon units before discharging from the excavation. The limits of the excavation were determined by screening soil using organic vapor analyzers. Confirmation soil samples were collected for laboratory analysis. Once the excavation was completed the site was restored to original condition which included replacing sections of main driveway into the nursery facility. 1250 tons of petroleum contaminated soil removed. Excavation was approximately 12 feet deep. Responsible for managing client and property owner (Florida Division of Forestry) during source removal activities. Managed staff as well as subcontractors involved in the project. Provided technical guidance to staff during the project execution. **Fees: $145,000**

**e.**
(1) TITLE AND LOCATION *(City and State)*: **FDEP, Petroleum Pre-Approval Program Environmental Services, Miscellaneous Locations, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager -** Environmental services at over 400 petroleum sites statewide with a total value of over $80 million in contract fees, using innovative assessment and remediation techniques including direct push rigs for rapidly assessing the extent of soil and groundwater contamination, a fuel fluorescence detector for free product delineation, a cone penetrometer for rapidly identifying lithology and installing micro-wells, dual-phase extraction of soil gas and groundwater, low-flow biosparging with 800-foot horizontal wells, bioremediation of contaminated groundwater, natural attenuation of groundwater, using large-diameter augers to remove petroleum contaminated soil, and chemical injection. Duties include establishing and managing program budgets, schedules and technical scopes of work; review of deliverables and interfacing with client contacts. MACTEC has conducted over $20 million dollars of assessment and remediation work under this program. **Fees: $50,000,000**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **James A. Horton, PE** | **Quality Assurance / Quality Control** | **39** | **37** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Master of Science, Civil Engineering, Purdue University, 1972
Bachelor of Science, Civil Engineering, Purdue University, 1971

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Professional Engineer - Civil, FL, #23315, 1976

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

A Principal Geotechnical Engineer, Mr. Horton has more than two decades of experience managing operations for a MACTEC office while performing project management responsibilities on a number of large projects. In total, his experience encompasses all aspects of engineering projects, with particular focus on geotechnical support for design, construction and environmental investigations. He has supervised field and laboratory investigations, drilling teams, and report preparation, and has encountered made recommendations for a variety of foundation alternatives, site preparation techniques, and construction methods.

Mr. Horton has managed and provided senior technical review on several hundred geotechnical explorations. Specialty geotechnical areas include the consolidation characteristics of organic soils, vibrations associated with pile foundation installation, and driven pile foundation design. He has provided expert testimony primarily in the area of structure distress as a result of settlement. He has been involved in all aspects of pavement design, varying from material parameter selection to thickness determination. Since 1988, Mr. Horton has also provided senior technical review of environmental projects of varying degrees, including Phase I site assessments and site contamination assessments.

## 19. RELEVANT PROJECTS

**a.**

(1) TITLE AND LOCATION *(City and State)*

**Alabama Power Company Barry-Chickasaw Line Geotechnical Services, Mobile, AL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2001 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal:** Responsible for coordinating drilling and performed project oversight activities. **Scope:** Geotechnical drilling and laboratory testing services at a remote wetlands location in south Alabama. Project required specialized equipment to access drilling locations. **Fees: $108,850**

**b.**

(1) TITLE AND LOCATION *(City and State)*

**Baymeadows Road Drilled Shaft Inspection Services, Jacksonville, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2011 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal Engineer:** Project Principal responsible for providing oversight of drilled shaft inspection services for Baymeadows Road rehabilitation and repair. **Scope:** MACTEC was responsible for providing drilled shaft inspection services for Baymeadows Road rehabilitation and repair. **Fees: $14,700**

**c.**

(1) TITLE AND LOCATION *(City and State)*

**Blue Cross and Blue Shield Geotechnical and Construction Quality Assurance for Office Buildings, Jacksonville, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 1999 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Geotechnical Engineer / Project Manager:** Responsible for project management duties and technical oversight. **Scope:** Engineered construction services including geotechnical exploration, laboratory services, and construction inspection and monitoring for new construction of two six-story office buildings constructed concurrently. **Fees: $345,180**

**d.**

(1) TITLE AND LOCATION *(City and State)*

**Brunswick Cellulose, Inc. Asset Optimization Geotechnical, Construction Materials Testing and Inspection Services, Brunswick, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2008 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal:** Mr. Horton is overall responsible for the technical aspects of this project. Through our internal QC/QA process he manages the quality of our inspection and testing services. **Scope:** Geotechnical services, construction materials testing and structural steel inspection services for facility / process expansion and upgrades at major cellulose production operation providing five new buildings on three acres, comprising a bleach plant, digesters, evaporators and cooling tower. Services also included Pile Driving Analysis (PDA) testing for piles, and pile driving monitoring. **Fees: $152,500**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Ronald White, PG** | **Site Assessment/Phase I & II ESA** | **21** | **20** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
BS, Geology, Florida State University, 1990

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Professional Geologist, FL, #PG00002068

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Mr. White is a Project Manager and Senior Geologist for several multimillion dollar contracts involving contamination investigation, design, and construction. Mr. White is the Contract Manager for three State programs including the FDEP State Brownfields Program contract, the CERCLA/SARA Site Assessments contract and the Site Investigation Section contract for Groundwater Investigations. His areas of expertise include project management and technical support of assessment projects and remedial investigations including hazardous waste and petroleum contamination assessment, aquifer characterization, and regulatory support and interaction. Mr. White also manages and provides technical leadership for numerous projects conducted at several State of Florida contracts as well as commercial clients. His experience includes Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site inspections, Resource Conservation Recovery Act (RCRA) facility investigations, Targeted Brownfields Assessments, remedial investigations, aquifer testing, hazardous waste site characterization, and Phase I Environmental Site Assessments (ESAs).

## 19. RELEVANT PROJECTS

**a.** (1) TITLE AND LOCATION *(City and State)*
**Florida Department of Environmental Protection (FDEP), CERCLA / SARA Site Assessments, Targeted Brownfield Assessments and Source Removals 2005-2010, Various Cities, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Contract Manager / Project Manager:** Responsible for overall technical direction of CERCLA Site Inspections and Brownfields site assessments; prepared cost proposals, oversaw implementation of the field programs, and provided technical review of data and reports. Project Manager CERCLA / SARA site assessments and Targeted Brownfields Assessments and source removals on task assignment basis at impacted locations throughout State of Florida; services provided under master services agreement. Locations included current and former dry cleaning facilities, service stations, industrial facilities, vehicle maintenance shops, printing shops and underground storage tank farms. Soils impacted with petroleum products, metals, PCEs and other solvents. **Fees: $1,700,575**

**b.** (1) TITLE AND LOCATION *(City and State)*
**FDEP, Site Investigation Section, Various Locations, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Contract Manager / Project Manager:** Responsible for overall technical direction of SIS Site Investigation site assessments; prepared cost proposals, oversaw implementation of the field programs, and provided technical review of data and reports. Project Manager SIS site assessments on task assignment basis at impacted locations throughout State of Florida; services provided under master services agreement. Locations included current and former dry cleaning facilities, commercial and industrial facilities, vehicle maintenance shops, landfills, auto scrap yards, and. Soils impacted with petroleum products, metals, PCEs and other solvents. **Fees: $1,163,000,000**

**c.** (1) TITLE AND LOCATION *(City and State)*
**FDEP, Drycleaning Solvent and Hazardous Waste Site Cleanup Program, Various Locations, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Field Operations Leader, Technical Lead:** Conducted hazardous waste and solvent cleanup and remediation services at dry cleaning business sites. Services included environmental and contamination assessments (soil, soil gas and groundwater sampling and analysis); monitoring well installation; recommendation of remediation technology; remedial design, development and testing; system operation and maintenance; and project documentation. Responsible for installation and monitoring of groundwater monitoring wells and subsequent hydrogeologic interpretation. **Fees: $1,123,800**

**d.** (1) TITLE AND LOCATION *(City and State)*
**FDEP, Petroleum Cleanup Section, Various Locations, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Project Manager:** Environmental services at over 400 petroleum sites statewide with a total value of over $80 million in contract fees, using innovative assessment and remediation techniques including direct push rigs for rapidly assessing the extent of soil and groundwater contamination, a fuel fluorescence detector for free product delineation, a cone penetrometer for rapidly identifying lithology and installing micro-wells, dual-phase extraction of soil gas and groundwater, low-flow biosparging with 800-foot horizontal wells, bioremediation of contaminated groundwater, natural attenuation of groundwater, using large-diameter augers to remove petroleum contaminated soil, and chemical injection. Responsible for managing the scope, schedule, and budget of over $10 million in projects and provided technical leadership for many of these petroleum sites. **Fees: $8,000,000**

**e.** (1) TITLE AND LOCATION *(City and State)*
**ABB, Inc. Panama City Site Soil Contamination Assessment and Remedial Action Source Removal, Panama City, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2006 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Field Operations Leader** - Remediation of approximately 2 acres (14 sites) of solvent-contaminated soil from beneath 10,000-SF building and subsequent remediation of solvent contamination in the groundwater using "NEAT technology," which entails injection of air with enhanced nutrients to bioremediate groundwater contamination. Remediation of mineral oil spills, petroleum / petroleum aromatic hydrocarbon (PAH) contamination, mercury buildup and radiological D&D under RCRA and CERCLA programs. Services provided at sites since 1993. Responsible for installing groundwater monitoring wells and hydrogeologic interpretation. **Fees: $496,610**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| **Geoff Schaefer, PE** | **Engineering Design** | **a. Total** 16 | **b. Current Firm** 11 |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
MS, Civil Engineering, Florida State University, 2000 Bachelor of Science, Chemistry, Florida State University, 1995

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Professional Engineer, FL, # 64914

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Mr. Schaefer is a senior engineer with experience that includes developing, designing, and implementing Remedial Action Plans (RAPs) and pilot studies; planning and conducting field investigations; overseeing conventional, direct-push technology and directional drilling operations; and providing remedial construction oversight. He has also written and reviewed remedial action and status reports, cost proposals, statement-of-work documents, technical memoranda, and feasibility studies for a variety of clients in state and local government and private industry. Mr. Schaefer also has investigative research experience for university departments (oceanography and chemistry) in a variety of disciplines including the collection, chemical analysis, and data interpretation of the following types of samples: radioisotopes, nutrients, geophysical parameters, trace level mercury and iron, phosphorous speciation, and volatile, semi-volatile, and pesticides.

## 19. RELEVANT PROJECTS

**a.** (1) TITLE AND LOCATION *(City and State)*
**Former ABB, Inc. Site Contamination Assessment, Soils Source Removal, and Groundwater Remediation, Panama City, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2011 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Project Engineer:** Responsible for performing oversight of monthly system operation and quarterly sampling events. Scope: Remediation of solvent-contaminated soil from beneath 17,600-SF building, on a 2-acre site, and subsequent remediation of solvent contamination in the groundwater. MACTEC has provided services at this site since 1993. Services have included assessments, remedial designs and implementation, regular groundwater monitoring and reporting, and performance of pilot studies to identify the remedial technology that will most effectively overcome the challenges of the site and achieve final closure with controls. **Fees: $496,610**

**b.** (1) TITLE AND LOCATION *(City and State)*
**FDEP - Drycleaning Solvent and Hazardous Waste Site Cleanup Program, Various Locations, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Project Engineer:** Responsibilities include monitoring for natural attenuation (NA), designing remediation systems and pilot studies, conducting field activities including soil and groundwater sampling, subcontractor oversight, data analysis, project planning, and writing cost proposals, bid solicitations, and status reports relaying site activities and remediation status to FDEP site managers. **Fees: $8,000,000**

**c.** (1) TITLE AND LOCATION *(City and State)*
**FDEP - Statewide CERCLA / SARA Site Assessments, Targeted Brownfield Assessments and Source Removals, Various Cities, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Engineer of Record:** Responsible for engineering design and specifications for remedial projects on this contract. Scope: CERCLA / SARA site assessments and Targeted Brownfields Assessments and source removals on task assignment basis at impacted locations throughout State of Florida; services provided under master services agreement. Locations included current and former dry cleaning facilities, service stations, industrial facilities, vehicle maintenance shops, printing shops and underground storage tank farms. Soils impacted with petroleum products, metals, PCEs and other solvents. **Fees: $1,123,880**

**d.** (1) TITLE AND LOCATION *(City and State)*
**FDEP - Clara White Mission Property Site Source Removal Services, Jacksonville, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Senior Engineer:** Provided engineering design and specifications. Source removal services for vacant 1-acre parcel in downtown Jacksonville (Historic LaVilla Neighborhood) impacted by petroleum-based contaminants. Removal services involved implementation of dewatering system and addition of Oxygen Release Compound (ORC) and petroleum-specific bacterial solution to augment attenuation / degradation of contaminants. Approximately 2,500 tons of contaminated soil excavated and disposed. **Fees: $250,000**

**e.** (1) TITLE AND LOCATION *(City and State)*
**FDEP - Pre-Approval Program, Walker's General Store Soil Vapor Extraction (SVE) Well Installation, Wacissa, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Senior Technician:** Responsible for conducting an interim action to reduce levels of PCE in groundwater; designed and implemented a RAP based on a successful chemical oxidation pilot test using hydrogen peroxide (Fenton's Chemistry) to address PCE contaminated groundwater and soil vapor extraction (SVE) to address PCE contaminated soil. Scope: Conducted soil assessment activities (soil gas survey, soil borings and sample analysis), groundwater sampling and analysis, and remedial pilot testing (injection wells) of contaminated area (VOCs) surrounding dry cleaning facility in commercial area. **Fees: $600,000**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Narayanan Raghupathi, PE** | **Engineering Design O&M Discipline Lead** | **9** | **9** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
Master of Public Health, Environmental & Industrial Health, University of Michigan, 1979
BS, Biology, Baldwin Wallace College, 1974

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Professional Engineer, FL, #63969

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

**Career Summary:** Mr. Raghupathi is a senior environmental engineer with several years of project experience that includes developing, designing, and implementing Remedial Action Plans (RAPs) and pilot studies, contamination assessment, remedial investigations, and feasibility studies. His experience includes site assessment, well drilling and Geoprobe (direct-push technology) oversight, excavation and retaining wall installation oversight using large diameter augers (LDAs), groundwater, surface water, and soil sampling, aquifer characterization, general construction oversight and supervision of health and safety aspects. He has experience in installation and construction oversight of remedial systems, system monitoring, and operation and maintenance. He has also written remedial action and status reports, cost proposals, statement-of-work documents, technical memoranda, and feasibility studies. Other experience includes scientific data acquisition, management, and interpretation, computer applications, report writing, and project planning.

## 19. RELEVANT PROJECTS

**a.**
(1) TITLE AND LOCATION *(City and State)*: **Florida Department of Environmental Protection (FDEP), Pre-Approval Program, Walker's General Store Soil Vapor Extraction (SVE) Well Installation, Wacissa, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Responsible for developing project scope and budget, maintaining schedule and oversight of project activities. Installed three vertical and one horizontal SVE well for remediating free product at the site. Installed an internal combustion engine (ICE) for remediating the free product. Scope: Installation of horizontal and vertical soil vapor extraction (SVE) wells, and installation of Internal Combustion Engine (ICE) and services for system startup, at environmentally impacted site of rural service station that previously experienced free product contamination from leaking underground storage tanks (USTs), with resulting plume extending across 11.4-acre area and more than 100 feet in depth, impacting the Floridan aquifer and several area domestic water wells. SVE well system and ICE to continue ongoing groundwater recovery and treatment effort. **Fees: $94,410**

**b.**
(1) TITLE AND LOCATION *(City and State)*: **FDEP Brooker Grocery Site Remediation Operation & Maintenance (O&M) Services, Brooker, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Responsible for developing project scope and budget, maintaining schedule, and oversee in project activities. Scope: Operations and maintenance (O&M) services for MPE and super-Ox remediation systems for environmental remediation efforts at retail store site. Services included quarterly groundwater sampling and submission of quarterly O&M reports. **Fees: $171,980**

**c.**
(1) TITLE AND LOCATION *(City and State)*: **FDEP, Statewide CERCLA / SARA Site Assessments, Targeted Brownfield Assessments and Source Removals, Various Cities, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Principal Engineer:** Responsible for engineering design and specifications for remedial projects on this contract. Scope: CERCLA / SARA site assessments and Targeted Brownfields Assessments and source removals on task assignment basis at impacted locations throughout State of Florida; services provided under master services agreement. Locations included current and former dry cleaning facilities, service stations, industrial facilities, vehicle maintenance shops, printing shops and underground storage tank farms. Soils impacted with petroleum products, metals, PCEs and other solvents. **Fees: $1,123,800**

**d.**
(1) TITLE AND LOCATION *(City and State)*: **FDEP, Orlando Sanford International Airport Site 5 Remediation, Sanford, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2006 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Engineer:** Responsible for reviewing engineering calculations for the Limited Scope Remedial Action Plan (LSRAP) and developed cost proposal for implementation. Scope: Soil remediation services at Site 5, former JP-5 fuel storage area of Orlando Sanford International Airport. (Airport is former Sanford Naval Air Station.) Soil excavation of contaminated soils at previous site of underground storage tank area followed by soil treatment utilizing oxygenating compound and proprietary microbial mixture. Also implemented groundwater monitoring program. **Fees: $1,035,570**

**e.**
(1) TITLE AND LOCATION *(City and State)*: **Former ABB, Inc. Site Contamination Assessment, Soils Source Removal, and Groundwater Remediation, Panama City, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2011 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Engineer:** Remediation of solvent-contaminated soil from beneath 17,600-SF building, on a 2-acre site, and subsequent remediation of solvent contamination in the groundwater. MACTEC has provided services at this site since 1993. Services have included assessments, remedial designs and implementation, regular groundwater monitoring and reporting, and performance of pilot studies to identify the remedial technology that will most effectively overcome the challenges of the site and achieve final closure with controls. **Fees: $496,610**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Russell Edgar Stauffer, PE, LEED AP** | **Asbestos, Lead-Based Paint Indoor Air Quality** | **49** | **14** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Master of Business Administration, Business Administration, University of South Florida, 1988 Bachelor of Science, Civil Engineering / Building Construction, Temple University, 1977

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Professional Engineer, FL, #25233, 2006 Professional Engineer, NJ, #24GE02390800, 2006 AHERA, #100445-1492AHERA, #10044-1525AHERA, #100443-1563AHERA, #20674Certified Indoor Environmental Consultant, #0703014Lead-Based Paint, #FL-R-4379-2Lead-Based Paint, #FL-P-4379-2Lead-Based Paint, #FL-S-4379-2LEED Accredited, #NV9999Licensed Asbestos Consultant, #EA0000016NIOSH 582 Airborne Asbestos Sampling / Evaluation, #NV9999

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Mr. Stauffer is a Principal Engineer and Project Manager in the Facilities Services Department of MACTEC's Tampa office. He has served as a site representative, project manager and Consultant-of-Record for numerous Asbestos, Lead-Based Paint, Indoor Air Quality and Radon projects. His total professional experience also includes conducting extensive Asbestos and Lead-Based Paint training classes and presentations. Mr. Stauffer's experience, prior to and including MACTEC has also involved acting as Client Manager for over 35 school districts and universities under term consulting agreements. In addition to being responsible for Asbestos AHERA inspections, Mr. Stauffer also developed Management Plans, Specifications, Operations and Maintenance (O&M) Programs and conducted OSHA-compliance training programs for numerous public and private entities. He has also conducted similar Lead-Based Paint and Indoor Air Quality activities, including inspections, specification development, Operations and Maintenance Program development and providing HUD and OSHA required training.

Mr. Stauffer has had extensive experience in many engineering and industrial hygiene / environmental projects. He has served as the designer of structural steel and reinforced structures, roadway and railway projects, specification development for Nuclear and Fossil-Fuel power plants and more traditional public, commercial and private structures. In addition, his experience has included responsibility for client meetings and presentations, project staffing and public relations/interaction.

## 19. RELEVANT PROJECTS

**a.**

(1) TITLE AND LOCATION *(City and State)*

**Avaya, Inc. Environmental, Health & Safety (EH&S) Support Services Worldwide, Locations Worldwide,**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2009 — CONSTRUCTION *(If applicable)*: w/ earlier contracts N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**EHS Compliance Assessor:** Responsible for managing and performing EHS tasks at client's facilities in Florida. **Scope:** Strategic partnership / staff augmentation consulting worldwide, providing environmental, health & safety (EH&S) services and support for one of the nation's largest providers of corporate communication equipment, network cable systems, software systems, and voice / data consultation. Activities include legal / regulatory, training and consulting support, and corporate auditing. **Fees: $11,700,000**

**b.**

(1) TITLE AND LOCATION *(City and State)*

**Baldwin County Board of Education School and Facilities Pre-Demolition and Renovation Abatement Services, Fairhope, Robertsdale, AL**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal:** Responsible for technical review of services provided. **Scope:** Asbestos consulting services prior to demolition of some school facilities and renovation of others within school system, supporting modernization and expansion effort. Services performed prior to partial or full demolition services at multi-facility campuses of Robertsdale Elementary School (10 buildings, 8,100 SF) and Fairhope Middle School (11 buildings, 23,320 SF), and prior to renovation of single-story, multi-office Tharp Instructional Resource Center (removal of mastic tile). Services included surveys, abatement design, development of bid specifications / package, assistance with contractor selection, and project oversight. **Fees: $24,350**

**c.**

(1) TITLE AND LOCATION *(City and State)*

**Caldesi Construction Company / U.S. Air Force - MacDill Air Force Base, Building 805 Asbestos and Lead-Based Paint Survey, Tampa, FL**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal:** Responsible for providing principal-level review of project activities and deliverables; developed scope of work. **Scope:** Facilities environmental services for asbestos (NESHAP) and lead-based paint survey for an existing 3,200 SF single-story building of concrete block construction, with bar joists supporting a built-up roof and interior areas built out, prior to renovation activities commencing. **Fees: $8,400**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Ann B. Shortelle, PhD** | **Surface Water Quality** | **27** | **23** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
PhD, Limnology, University of Notre Dame, 1985; BS, Biology, Mercer University, 1975

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
NA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Dr. Shortelle is a Chief Scientist, Senior Principal and Senior Project Manager with extensive professional experience over two decades in limnology, lake and reservoir management, ecological risk assessment and toxicology, and bioaccumulation and ecological modeling, and environmental assessments. She has managed numerous exposure and risk assessments of contaminated sites and spills, as well as aquatic, estuarine, and wetland assessments related to eutrophication, acid deposition, toxic effluents, biomonitoring, siting and licensing, mitigation planning, and natural resource damage assessment. She has managed and conducted field and laboratory bioaccumulation studies and bioassays, and has developed and verified bioaccumulation models for contaminants in riverine systems. The project experience also included biostatistical analyses of multimedia systems with aquatic and terrestrial biota. NEPA related work has included Environmental Impact Statements (EIS), Environmental Reviews (ERs), Environmental Assessments (EAs and EIAs), and Biological Assessments (BA) at sites worldwide including the Caribbean.

## 19. RELEVANT PROJECTS

**a.**
(1) TITLE AND LOCATION *(City and State)*
**US Army Corps of Engineers (USACE)- Huntsville District, Hazardous Waste Remedial Design and Related Environmental Services, Various Facility Location**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Delivery Order Manager:** Hazardous and toxic waste investigations, chemical warfare materials studies, remedial designs, construction phase services, GIS services and related environmental services at key installations throughout US and Caribbean impacted with use and presence of military munitions. Included services at all five major Defense Distribution / Supply Centers and all 11 active Defense National Stockpile Sites. Responsible for scope, schedule, and budget on multiple task orders. **Fees: $3,757,300**

**b.**
(1) TITLE AND LOCATION *(City and State)*
**US Army Anniston Army Depot (ANAD) and Milan Army Ammunition Plant Remediation, Anniston, AL and Milan, TN**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Risk Assessor:** MACTEC's scope for Milan Army Ammunition Plan and ANAD included environmental assessment, remedial system design and implementation, and regulatory negotiation for VOC-contaminated soil and groundwater using in situ oxidation, specifically injection of Fenton's reagent, under an IDIQ contract for US Army Environmental Center administered by USACE Baltimore District. Savings to the army exceeded $27 million through use of this technology at ANAD and, when implemented at Milan Army Ammunition Plant, the savings are estimated to total $33 million over the Army's approach using pump-and-treat technology at both sites. Responsible for conducting terrestrial and aquatic Tier 2 assessment concerning munitions and metals in streams and landfills. Issues included munitions and munitions residues, other organics, and metals in terrestrial, aquatic, and semi-aquatic habitats. Performed a food web modeling analysis using site-specific data and results analyzed for both human and non-human receptors. Conducted toxicity testing to evaluate the need for sediment remediation in support of the Tier 2 ecological risk assessment. **Fees: $10,898,510**

**c.**
(1) TITLE AND LOCATION *(City and State)*
**Florida Department of Environmental Protection (IFAS - SOLP) 28 Agricultural Research Stations Contamination and Risk Assessments, Various Locations (28 in all), FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Wetlands Specialist:** Contamination Site Assessments, Risk Assessments and Remediation of 28 Research Agricultural and Educational properties operated by the University of Florida Institute of Food and Agricultural Sciences. Work initiated under FDEP Consent Order with the Florida Department of Environmental Protection to address historical hazardous wastes disposal practices at more than 130 sites. Responsible for the evaluation of fate of chemicals of concern to riparian wetland habitat and adjacent floodplain, lakes, and other water bodies for effects, and as sites for potential storm water retention and wetland restoration. **Fees: $1,250,000**

**d.**
(1) TITLE AND LOCATION *(City and State)*
**Carolina Power & Light Sanford Remediation Group Ecological Risk Assessment, Sanford, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2004 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Principal Scientist:** Comprehensive Ecological Risk Assessment for approximately one mile of streambed sediments contaminated by former MGP site (OU3). Collected 16 sediment samples and performed physical characterization, chemical analysis (subcontracted), and toxicity testing. Results interpreted using statistical evaluation procedures in accordance with CERCLA risk assessment guidance. Responsible for performing ecological risk assessment and technical review and interfacing with regulatory agencies. **Fees: $154,000**

**e.**
(1) TITLE AND LOCATION *(City and State)*
**St. Johns River Water Management District Lake Apopka NSRA & Districtwide Environmental Assessments, Palatka and Other Areas, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2005 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Senior Scientist:** Phase I-IV Environmental site assessments, sampling and analysis / contamination assessments, feasibility studies; preliminary design services and remedial action plans for approximately 100 parcels in several counties in north and northeast Florida. Assessed more than 60,000 acres, with more than 23 assessments for large tracts exceeding 300 acres (average parcel size 1,300 acres). One of most significant projects for Lake Apopka North Shore Restoration Area (NRSA). Responsible for serving as Quality Control / Wetlands Ecologist for Lake Apopka North Shore Restoration Area (NSRA) Feasibility Study. **Fees: $525,560**

# INTRANET LAB SERVICES, LLLP

IntraNet

Lab Services, LLLP

March 14, 2011

MACTEC Engineering & Consulting, Inc.
2533 Greer Road, Suite 6
Tallahassee, Florida 32308

Dear Mr. Eric Blomberg,
IntraNet Lab Services, LLLP (IntraNet) is pleased to have been selected as part of the MACTEC Engineering & Consulting, Inc. team for the Request for Proposal for Civil Engineering Services, Continuing Supply RFP Number: BC-03-17-11-25.

IntraNet provides laboratory support services for analytical testing and analysis and is certified by the City of Tallahassee, Leon County, and the State of Florida as a Minority Business Enterprise.

The responsible person for submitting this letter of intent is Ava O'Hollearn. Ava O'Hollearn is the President of IntraNet Lab Services, LLLP. She may be reached at (850) 385-9400, and is located at 3838 Killearn Center Court, Tallahassee, Florida 32309.

Should you have any questions or need additional information please feel free to contact us.

Thank you for your time and consideration.

Sincerely,

Ava O'Hollearn
President

IntraNet Lab Services, LLLP
Tallahassee, Florida
We are a certified Minority Business Enterprise for the City of Tallahassee, Leon County and the State of Florida

3838 Killearn Center Court · Tallahassee, FL 32309 · Phone: (850) 385-9400 · Fax: (850) 385-2469


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*

CITY OF TALLAHASSEE

February 16, 2011

Intranet Lab Services, LLLP
Ms. Ava O'Hollearn
3838 Killearn Center Court
Tallahassee, Fl 32309

**CERTIFICATION NUMBER: 0738W-COT-06**

Dear Ms. O'Hollearn:

## CONGRATULATIONS!

The City of Tallahassee Minority Business Enterprise (MBE) Office has reviewed your application and supporting documentation for re-certification as a minority business. Accordingly, we are pleased to announce that your company has been re-certified for a period of one (1) year. The re-certification of the business is applicable when business is conducted consistent with this specialty(s):

**Analytical Laboratory Services**

Your submittal of bids to supply other products or services outside of this specialty(s) may result in the contracting entity not receiving credit for MBE participation in that business transaction.

Please be advised that as of March 2003, the State of Florida terminated its participation in the Florida Statewide and Inter-Local Reciprocal Certification Program. As a result, this **certification is for the City of Tallahassee and Leon County Board of County Commissioners projects only**. We encourage you to become an active bidder in contracting and subcontracting opportunities. For bidding information, please visit the City of Tallahassee's webpage at http://www.talgov.com/dma/procurement/bidinfo.cfm.

This re-certification must be renewed annually. The MBE Office will send a re-certification application at least thirty (30) days prior to the certification expiration date. If there is a change in ownership or control of the business, or if you propose to provide additional services not listed previously, the MBE Office must be contacted and a new Certification Application completed. Furthermore, please contact the MBE office if your business name, address or phone number changes so that we have the most current information available concerning your business. Failure to report such changes may constitute grounds for cancellation of this certification.

The City of Tallahassee reserves the right to cancel this certification at any time, subject to your right to appeal. If such action is deemed necessary, you will be notified of the action, the appeal process and of your appeal rights.

Thank you for applying to the City of Tallahassee MBE Program. Should you have any questions or need to contact the MBE Office, please call us at (850) 891-6500.

Sincerely,

Ben Harris, MBE Administrator
Minority Business Enterprise Office

BH/bdp
Attachment

Certification Effective Date: **February 16, 2011**
Certification Expiration Date: **February 29, 2012**

cc: Leon County Board of County Commissioners -
Minority/Small Business Enterprise Division

CITY OF TALLAHASSEE
ECONOMIC & COMMUNITY DEVELOPMENT


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

ARCHEOLOGICAL CONSULTANTS, INC.

# ARCHAEOLOGICAL CONSULTANTS INC.

ARCHAEOLOGICAL SURVEYS AND EXCAVATIONS

HISTORIC BUILDING SURVEYS AND EVALUATIONS

ARCHIVAL RESEARCH

CULTURAL RESOURCE ASSESSMENTS

NATIONAL REGISTER NOMINATIONS

INTERPRETIVE DISPLAYS

PRESERVATION PLANNING

*Florida's First Choice in Cultural Resource Management*

A MEMBER OF ACRA American Cultural Resource Association

March 15, 2011

Eric A. Blomberg, P.G. Office Manager/Principal
MACTEC Engineering and Consulting, Inc.
2533 Greer Rd, Ste. 6
Tallahassee, FL 32308

RE: Leon County Civil Engineering Services Continuing Supply.
Proposal Number BC-03-17-11-25

Archaeological Consultants, Inc. (ACI) is pleased to provide this letter of commitment to work with MACTEC Engineering and Consulting, Inc., Inc. on the above-referenced project to provide cultural resource management services.

We appreciate this opportunity, and look forward to working with you and your team.

Sincerely,

Marion M. Almy, RPA
President

B10091

8110 BLAIKIE COURT, SUITE A, SARASOTA, FLORIDA 34240, (941) 379-6206, FAX (941) 379-6216
• TAMPA BAY AREA OFFICE: (727) 588-0056 • TALLAHASSEE AREA OFFICE: (850) 926-9285 • ST. AUGUSTINE AREA OFFICE: (904) 829-9100
Visit Our Web Site www.aci-crm.com


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*

CS&K ASSOCIATES, INC.

**CS & K**

**ASSOCIATES, INC**
5003 Crestwood Court
Tallahassee, Florida 32311
Phone (850) 878-4886
Fax (850) 878-4185

March 15, 2011

MACTEC Engineering and Consulting, Inc.
2533 Geer Road, Suite 6
Tallahassee, FL 32308

Re: Leon County Public Works Department
RFP-025-0-2011/KR
Request for Proposals for Civil Engineering Services, Continuing Supply

Dears Sirs:

This letter confirms the interest and commitment of CS & K Associates, Inc. to provide services for the above referenced Request for Proposals. This letter serves as written verification of our intent to be identified as a subcontractor of the prime contractor, MACTEC Engineering and Consulting, Inc., on this contract. CS & K is committed to provide all necessary resources to ensure the successful performance of the contract.

CS & K is a Leon County certified Women-Owned Business Enterprise and a certified Small Business Enterprise.

Thank you,

Lorraine Clark

Lorraine Clark
President


CITY OF TALLAHASSEE

Certifies that

# CS & K ASSOCIATES, INC.

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

For a period of two (2) years beginning

April 13, 2010 to April 12, 2012

Iranetta J. Dennis, Leon County MWSBE Director

# Leon County Board of County Commissioners

## Minority, Women & Small Business Enterprise Division

Certifies that

**CS & K Associates, Inc.**

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:

January 24, 2011 to January 23, 2013

Iranetta J. Dennis

Iranetta J. Dennis, Leon County M/WSBE Director

| Project Examples, Last 5 Years CS& K Associates, Inc. | | | | | |
|---|---|---|---|---|---|
| Profile Code | "P," "C," "JV," or "IE" | Project Name and Location | Owner Name and Address | Cost of Work (in thousands) | Completion Date (Actual or Estimated) |
| 099 | C | 1 Fairbanks Disposal Pit<br>Gainesville, Florida | Florida Department of Transportation<br>1901 South Marion Avenue<br>Lake City, Florida 32055 | 100 | Feb 2013 |
| 099 | C | 2 Fairbanks Disposal Pit<br>Gainesville, Florida<br>Monitoring Well Abandonment | Florida Department of Transportation<br>1901 South Marion Avenue<br>Lake City, Florida 32055 | 20 | June 2011 |
| 099 | C | 3 Leon County US 27 South Solid Waste Management Facility<br>Tallahassee, FL | HDR Engineering, Inc.<br>200 W. Forsyth Street, Suite 800<br>Jacksonville, FL 32202 | 20 | Jan 2012 |
| 099 | C | 4 Leon County US27 South Solid Waste Management Facility<br>Tallahassee, FL | CS & K Associates, Inc.<br>5003 Crestwood Court<br>Tallahassee, FL 32311 | 13 | July 2007 |
| 099 | C | 5 Wigglesworth Well Replacement<br>Alachua County, Florida | Florida Department of Transportation<br>1901 South Marion Avenue<br>Lake City, Florida 32055 | 30 | August 2006 |
| 099 | C | 6 Leon County US 27 South Solid Waste Management Facility<br>Tallahassee, FL | PBSJ, Inc.<br>482 South Keller Road<br>Orlando, Florida | 60 | August 2007 |
| 099 | C | 7 Cane Run Apartments<br>Louisville, KY | Cornerstone Investments, LLC<br>4012 Crawford Ave.<br>Louisville, KY 40216 | 3.5 | September 2007 |
| 099 | C | 8 Marpan Recycling, L.L.C.<br>6020 Woodville Highway<br>P.O. Box 6025<br>Tallahassee, Florida 32314 | CS & K Associates, Inc.<br>5003 Crestwood Court<br>Tallahassee, FL 32311 | 3 | On-going |

# FLORIDA ENVIRONMENTAL AND LAND SERVICES, INC.

Florida Environmental & Land Svcs, Inc

221-4 Delta Court
Tallahassee, FL 32303
850.385.6255 office
850.385.6355 fax
www.felsi.org

March 14, 2011

Fredrika G. White
MACTEC Engineering and Consulting, Inc.
2533 Greer Road, Suite 6
Tallahassee, FL 32308

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

Ms. White:

This letter is to confirm that Florida Environmental & Land Services, Inc. will provide professional Environmental Consulting Services to MACTEC Engineering for services related to the Leon County Request for Proposal #BC-03-17-11-25.

Sincerely,

Elva Peppers

Elva L. Peppers

CITY OF TALLAHASSEE
ECONOMIC & COMMUNITY DEVELOPMENT

LEON

This certifies that

# FLORIDA ENVIRONMENTAL & LAND 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:

**NOVEMBER 5, 2010 TO NOVEMBER 30, 2011**

MBE ADMINISTRATOR

CERTIFICATION SPECIALIST


State of Florida

# *Minority, Women & Service-Disabled Veteran*

Business Certification

## Florida Environmental & Land Services, Inc.

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

7/13/2009 to 7/13/2011

*Torey Alston, Executive Director*

*Florida Department of Management Services*
*Office of Supplier Diversity*

ENVIRONMENTAL AND GEOTECHNICAL
SPECIALISTS, INC.

CITY OF TALLAHASSEE
ECONOMIC & COMMUNITY DEVELOPMENT

LEON COUNTY

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

# ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: BC-03-17-11-25

## PART II – GENERAL QUALIFICATIONS

*(If a firm has branch offices, complete for each specific branch office seeking work.)*

| | |
|---|---|
| 2a. FIRM (OR BRANCH OFFICE) NAME: Environmental and Geotechnical Specialists, Inc. | 3. YEAR ESTABLISHED: 1992 |
| | 4. DUNS NUMBER: 79-285-9191 |
| 2b. STREET: 104 North Magnolia Drive | 5. OWNERSHIP |
| | a. TYPE: Corporation |
| 2c. CITY: Tallahassee | 2d. STATE: FL |
| | 2e. ZIP CODE: 32301 |
| | b. SMALL BUSINESS STATUS |
| 6a. POINT OF CONTACT NAME AND TITLE: Judith M. Hayden, P.E., President | 7. NAME OF FIRM *(If block 2a is a branch office)* |
| 6b. TELEPHONE NUMBER: (850) 386-1253 | 6c. E-MAIL ADDRESS: Judy.Hayden@EGS-US.com |
| 8a. FORMER FIRM NAME(S) *(If any)* | 8b. YR. ESTABLISHED / 8c. DUNS NUMBER |

### 9. EMPLOYEES BY DISCIPLINE

| a. Function Code | b. Discipline | c. No. of Employees (1) FIRM | (2) BRANCH |
|---|---|---|---|
| 27 | Geotechnical Engineer | 10 | |
| 23 | Environmental Engineer | 3 | |
| 07 | Biologist | 1 | |
| 08 | Civil Engineer Technician | 6 | |
| 58 | Laboratory Technician | 6 | |
| 58 | Field Technician | 8 | |
| | **Total** | 34 | |

### 10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

| a. Profile Code | b. Experience | c. Revenue Index Number (see below) |
|---|---|---|
| S 05 | Soils & Geologic Studies | 5 |
| T 03 | Transportation Engineering | 5 |
| E 01 | Environmental Investigations | 2 |

### 11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

*(Insert revenue index number shown at right)*

| | |
|---|---|
| a. Federal Work | 1 |
| b. Non-Federal Work | 6 |
| c. Total Work | 6 |

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

### 12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: Judith M. Hayden

b. DATE: 3-15-2011

c. NAME AND TITLE: *Judith M. Hayden, P.E., President*

# B. Experience with Projects of a Similar Size

## *B1. Project Experience- References*

MACTEC understands that Leon County will require services of a multidisciplinary environmental consulting firm(s) for this Contract. The need for specific services has not been stated at this time. Consequently the consulting firm is expected to offer broad, multidisciplinary capabilities that mirror the scope and potential needs of Leon County.

Leon County's anticipated needs are very similar to those of other organizations that MACTEC has successfully supported in the recent past. Those clients include Alachua and Orange Counties, the Bureaus of Land Acquisition, Petroleum Cleanup and Waste Cleanup at FDEP and the five Water Management Districts. MACTEC has been successful in meeting customer needs, as they arise, because of the diverse skills and experience base of our staff. MACTEC is capable of supporting Leon County in meeting all the challenges that may arise in maintaining a safe and healthy environment for the citizens of Leon County in the coming years. Our experience is highlighted in project descriptions presented at the end of this Section.

## *B2. Additional Project Experience*

For the purpose of highlighting our past and present experience providing environmenal support services, we have grouped these services into three general categories: Environmental Data Collection, Assessment and Remediation Services and Other Enviromental Consulting Services. At any given time, MACTEC staff are working on projects in each of these categories. Our capabilities and experience includes:

**Environmental Data Collection**

This subsection addresses County requirements for environmental sampling and analysis, air quality monitoring, field surveys, and archaeological investigations. Monitoring represents recurring sampling and analysis and/or field measurements such as required in landfill monitoring. Phase II ESAs and contamination assessment include sampling and analysis, but are discussed separately under Assessment.

For over 50 years, MACTEC's environmental professionals have been performing environmental sampling in strict accordance with State of Florida requirements and - since their inception - with FDEP Standard Operating Procedures (SOPs). MACTEC can provide more than 30 FL-based employees who are trained and experienced in implementing FDEP sampling and field measurement SOPs for all water and soil sampling methods. Although less frequently requested, the MACTEC Team also includes employees trained in sampling biological tissues; collecting, identifying, and enumerating fish, benthic macroinvertebrates, and other wildlife species; and certified by FDEP to determine Stream Condition Index. MACTEC owns and deploys ISCO™ samplers to obtain flow-proportional storm event samples.

MACTEC is a national leader in ambient air monitoring. MACTEC operates the US Environmental Protection Agency's Clean Air Status and Trends Network (CASTNet), an 86 station nationwide air monitoring network that is used by EPA and the U.S. Congress to evaluate the benefits of the Clean Air Act of 1990. We have also provided similar services to Florida Counties. Ambient air quality monitoring is a fundamental requirement of air quality compliance surveillance, new source permitting, and health effects evaluation. MACTEC has extensive experience performing this service including planning, implementing, and operating air quality monitoring networks, and providing data management and interpretation assistance. We provide custom monitoring turnkey systems and services including site selection,

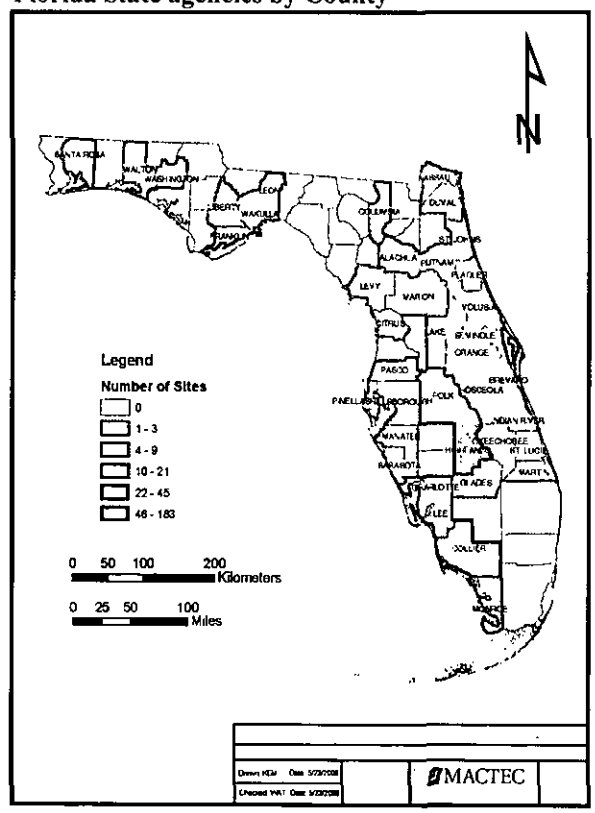
equipment, procurement, operation, reporting, and demobilization.

MACTEC has experience in virtually all types of measurement systems including continuous air quality and meteorological measurements, filter packs for measuring PM 2.5 and its chemical constituents, and various types of samplers (e.g., canisters) for sampling organic gases and air toxics. We are at the forefront of developing new measurement technologies of NOx, NH3, and other nitrogen species. MACTEC uses advanced database management systems for archiving, analyzing, and interpreting air quality data.

**Phase I and II ESAs (Audits)**

ESAs are performed in accordance with the American Society for Testing and Materials Guideline E-1527, which is endorsed by USEPA (40 CFR 312) as sufficient for ensuring compliance with the innocent landowner exclusion from liability under the Superfund Amendments and Reauthorization Act (SARA). MACTEC's capability and approach for performing ESAs for Florida governments under ASTM E-1527 requirement is demonstrated by our extensive experience performing ESAs for Water Management Districts, private clients and the FDEP Bureau of Land Acquisition. MACTEC has performed more than 500 ESAs for state and local government agencies in Florida since 1999, most for large parcels to be acquired for conservation.

**Number of ESAs performed by MACTEC for Florida State agencies by County**




The 2005 All Appropriate Inquiry (AAI) Rule (40 CFR 312) increased and standardized the information to be assessed by an environmental professional to comply with the requirement of "all appropriate inquiry". The AAI rule mandates that environmental professionals (EPs) must conduct all appropriate inquiries, and the EP must possess "sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the presence of a release or threatened release to the surface or subsurface of a property". The EP must hold certain degrees or be practicing within this field for a certain number of years. MACTEC has a large professional staff that meets the new requirements for EPs. The 2005 AAI Rule resulted from concerns over the poor quality of a significant percentage of Phase I ESAs. Because of MACTEC's high standards and the high level of focused investigation we have always put into preparation of Phase I ESAs, these rule changes did not significantly alter the high quality product we have produced for years.

In 2006 MACTEC implemented specific modifications to our procedures to conform to the revised guideline and rule. These procedures were implemented through Work and Test Procedures which are referred to and incorporated by reference in MACTEC's Quality Assurance Manual, and establish the following procedures:

- Defines the required level of involvement by MACTEC Principals (who must review and approve all MACTEC products) and EPs (who must lead and sign the ESA);
- Establishes qualifications and training requirements for EPs;

- Establishes a process for MACTEC employees to be designated by MACTEC as qualified EPs;
- Establishes a database of MACTEC employees who are qualified as EPs; and
- Provides other supporting documentation, including an ESA checklist, report template, and User Questionnaire.

MACTEC's prompt response to the revised requirements for ESAs that occurred in 2005 demonstrates our commitment to meeting our customers' requirements through a systematic quality assurance process.

MACTEC's in-house EP training and certification program has recognized 39 qualified EPs in MACTEC's Florida offices. All MACTEC ESAs conducted under this contract will be performed by qualified EPs, as defined by the AAI Rule, and further designated via MACTEC's internal training and certification process.

Our Florida-based EPs have successfully provided these services to state and local governments for many years. Leon County will benefit from MACTEC's experience in conducting assessments on a wide variety of sites. Our environmental assessment staff is prepared for virtually any situation that might be encountered in a property transfer evaluation. MACTEC has conducted numerous site assessments in rural areas associated with pastureland, forestland and wetlands.

The Phase I ESA typically includes a historical records search, a site tour, and interviews. MACTEC continues to develop and evolve procedures for the records search, site tour, and interviews to maximize efficiency, minimize cost, and add value to our client. In the initial planning for each project, MACTEC compiles a checklist of program/project specific requirements as well as data requirements that MACTEC has found through experience to be universal elements of a complete ESA. Once all of the specific data requirements for the project have been identified, the actual methods to collect the data in the most efficient and cost effective manner are determined. MACTEC has established contractual relationships with data management companies, who develop reports with data from all required public databases (e.g., EDR and EDM) to ensure "preferred" vendor pricing and quick response.

**From Phase I to Phase II: Accepting a Level of Risk**

At the conclusion of the Phase I ESA, MACTEC identifies Recognized Environmental Conditions (RECs), and makes recommendations for a Phase II ESA, if necessary. MACTEC understands that the County must ultimately decide what level of risk it is willing to accept regarding potential liability. When a Phase I ESA suggests that there is a possibility for contamination; MACTEC may recommend that it is not necessary to do any additional assessment. MACTEC has made such recommendations when remediation of a site will destroy the environment that is to be protected by the purchase.

The scope of a Phase II ESA can vary depending on the objective. In some cases, the potential exists for environmental liability, and sampling and analysis is necessary to obtain a "yes or no" answer. In other cases, the presence of contamination is known or probable, and it is necessary to characterize the nature and extent of the contamination to better understand the risk and associated financial implications if the land acquisition proceeds. In some other cases, where larger parcels of land may be involved and contamination is present or probable, it may be necessary to develop site characterization data that will allow the contaminated area to be excluded from the purchase, thus "cutting out" the part of the property containing the liability.

In all of these cases, an important objective of the Phase II ESA includes collection and analysis of environmental media in an efficient, cost effective manner. MACTEC has conducted hundreds of site investigations throughout Florida. We are able to design, implement, and complete focused and effective sampling and analysis programs required to more fully characterize contamination, determine fate and transport mechanisms, and evaluate possible remedial actions and their associated costs.

**Integrated Phase II Assessment Process.** We routinely use field measurements integrated with Direct Push Technology (DPT) to provide the "real time" data needed to efficiently install a monitoring well network that will provide accurate information. The DPT rig generates minimal soil cuttings, cuts through 6-inch-thick concrete, requires only about 7 feet of overhead clearance, and is capable of collecting soil, soil gas, and groundwater samples to depths of up to 100 feet. In short, it is an ideal sampling alternative for site characterization, especially on active sites or where access with a larger rig is a problem. For many sites, MACTEC deploys a minimally intrusive sampling and field analysis program, targeting areas of concern and characterizing the contaminants present before mobilization for permanent monitoring well installation, should it become necessary. Similarly, we have used surface geophysical technologies to provide information concerning potential source locations and subsurface conditions and reduce the magnitude and cost of investigative drilling and sampling. Our in-house geophysical experience and capabilities include surface applications, such as electromagnetics, ground penetrating radar, and magnetometer surveys.

MACTEC has also been contracted with the FDEP for many years to conduct Conservation Easement Monitoring of properties that have entered into Conservation Easements with the State of Florida. Under this contract MACTEC has successfully monitored compliance of these conservation easements by the owner of properties located throughout the state.

**Assessment and Remediation Services**

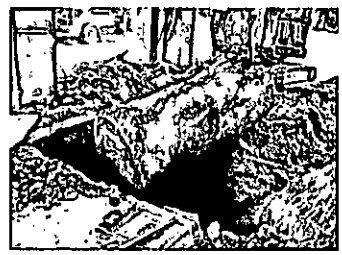
***Assessment.*** As stated earlier, MACTEC is a national leader in site assessment and remediation services because of our solutions-oriented approach. We understand our clients' goals and direct our energies toward attaining a solution that achieves these goals during every phase of project execution. MACTEC staff are highly knowledgeable of current FDEP and USEPA procedures from years of project execution, and will use this experience to work closely with the County to identify the most cost-effective solutions to environmental concerns. The following is a description of MACTEC's knowledge, skills, abilities and experience in planning and executing site assessments and remediation services.

- Over the last 26 years, MACTEC has worked on site assessments in every county in Florida. This experience has given us invaluable knowledge in regards to conducting site assessments when it comes to planning and executing a project from being familiar with permitting requirements of local agencies, to being familiar with the wide array of hydrogeologic conditions encountered throughout the State and the appropriate technologies to utilize for each. Our experience has proven to be an invaluable tool in developing a streamlined approach to conducting an assessment that saves time and saves money.
- MACTEC has conducted site assessments at many state agency sites, local government sites, Department of Defense (DOD) installations, and commercial client sites within Florida and the southeast region (USEPA Region IV territory). MACTEC has conducted hundreds of groundwater investigations in Florida directed at assessment of a wide spectrum of contaminants under a range of hydrogeologic conditions. Our staff has the experience necessary to accurately interpret and document investigation data. The objective of the site assessment is to determine the presence and nature of contamination at the site resulting from an alleged release of hazardous substances to the environment. For the FDEP Site Investigation Section (SIS) (from 1995 through present), MACTEC has completed or is currently conducting over 60 investigations to identify contaminant sources affecting groundwater supplies.
- From 1997 through 2003, MACTEC conducted site assessments and site cleanup at 26 FDEP drycleaning facilities and also conducted assessments and source removals at 29 state owned land cleanup sites. Several of the sites received site closure.
- For the FDEP Pre-Approval Petroleum Program MACTEC has conducted more than 350 site investigations, 95 remedial designs, and installed at least 75 remediation systems.
- For the Department of the Navy (DON), MACTEC conducted 118 RCRA Facility Investigations (RFIs), 91

CERCLA RI/Feasibility Studies (FS) investigations, 800 UST Contaminant Assessment Reports (CARs), and over 100 Remedial Action Plans (RAPs). Under this program, MACTEC managed more than 150 individual multitask contract task orders that ranged from $5,000 to $28M.

As shown, a primary focus of MACTEC is conducting environmental assessments including environmental baseline studies, CERCLA, RCRA, and Base Realignment and Closure Act (BRAC) assessments, and site cleanup under these programs. During the past three years alone, MACTEC has completed more than 1,000 environmental site assessments throughout the United States.

***Interim Remedial Measures.*** The objectives of a source removal/interim remedial measure is to remove and/or mitigate specific known or potential contaminant source(s) to minimize or prevent unacceptable exposure to human and ecological receptors. MACTEC has the experience and technical capabilities to implement source removal/interim remedial measures on short notice and with limited knowledge of site conditions in order to meet aggressive schedule and client expectations. MACTEC has conducted health threat evaluations, Interim Removal Actions (IRA) under CERCLA and HWCS and Interim Measures under RCRA to eliminate potential threats to human health and the environment. Additionally, MACTEC has conducted numerous interim source removals for the Petroleum Cleanup Program.



Our experience in conducting source removals and interim remedial measures is as extensive as it is varied with project strategies ranging from institutional controls (fencing, signage, and/or soil caps) to source removal (product recovery, soil, and drum/tank) to sediment stabilization. **For example,** in 2010 at the Bay City Elks Lodge Brownfield site in Tampa, Florida, MACTEC was tasked to complete an UST removal and closure. During UST removal activities which required structural stabilization of the building, as the USTs were under the building, metals contaminated soils were identified in the side yard which is utilized by the adjacent daycare center as a playground. MACTEC coordinated with the DOH, property owners and other stakeholders to institute immediate institutional controls. MACTEC performed additional assessment and prepared an interim source removal (ISR) plan. Contaminated soils were then removed and a soil cap was installed, thereby allowing the playground to be reopened to the public. During the removal, MACTEC set up dust monitoring meters around the perimeter of the site to monitor the publics' safety. Additionally, MACTEC was able to combine the ISR field effort with a second FDEP Brownfield tank removal and closure in the same area at the Cigar City site, saving the FDEP cost and time. The entire project duration was approximately 3 months including the UST removal, LSRAP development and approval for the removal of soil in the playground area and completion of the removal. Approximately 750 tons of metals contaminated soils were removed from the playground area. MACTEC has recommended No Further Action at this site.

Additionally, MACTEC has performed source removals utilizing a variety of non-traditional techniques such as, Large Diameter Augers (LDA) (approximately 75,000 tons cased and uncased) at the Suwannee County Road Department and soil vacuum for sandy soil removal inside buildings and around buried utilities.

MACTEC and its selected subcontractors are well positioned to mobilize technical resources for large, intermediate, and small task assignments on short notice for projects that may present an immediate threat to human and / or ecological receptors.

***Engineering Design.*** MACTEC has provided turnkey design services to large industrial, DOD, and public agency clients for more than 50 years. MACTEC has strong, proven credentials in design services, and provides full turnkey services in design, construction, and O&M. MACTEC has experience specific to drycleaning sites with chlorinated solvents. MACTEC has completed 9 RAPs for the HWCS, 5 RAPs for IFAS, 7 LSRAPs for

the Brownfield Section and over 100 RAPs for FDEP under other programs. Also, MACTEC Florida offices have completed over 150 RAPs and remedial designs for 15 different DOD (U.S. Navy and Army) facilities. Treatment processes that have been successfully employed include standard techniques such as air stripping and carbon adsorption, and also innovative processes such as *in-situ* advanced oxidation and bioremediation. MACTEC's designs encompass a wide range of available technologies and are not affected by the ownership of any specific patent or process. MACTEC's Design Service Center (DSC) provides clients access to our nation-wide experience in designing remedies for a wide range of other sites.

MACTEC believes the following elements are keys to the successful design of any remedial project: 1) a mutual and complete understanding between MACTEC, FDEP, and the property owner of site cleanup goals and strategy; 2) awareness of project cost and schedule constraints; 3) full knowledge of permitting requirements and agencies; 4) compliance with design and safety standards; 5) consideration of the constructability of the project; 6) awareness of the time frame for design, including permitting and preparation of plans and specifications.

The focus of MACTEC's remedial design is to develop the conceptual design and to prepare a constructible remedy that can be safely and cost effectively implemented. MACTEC's basic strategy for remediation has been aggressive treatment of the source area using conventional and innovative technologies. This approach reduces contamination mass and lowers O&M costs.

Prior to beginning any design project, MACTEC reviews existing data from the site assessment and RAE to determine if data in key areas are sufficient to initiate the design process. All our designs include a list of any assumptions and identify potential impacts of these assumptions on the construction phase. In addition, MACTEC design process is streamlined by using standard designs. Items that can be standardized include remediation wells, trailer mounted remediation equipment, soil-vapor extraction systems, and telemetry systems.

MACTEC is uniquely suited to provide the County with remedial design services as evidenced by the top ranking among the 12 State Cleanup Contractors in the Standard Air Sparge / Soil Vapor Extraction Design Evaluation task assignment results from December 2006. The 12 State Cleanup Contractors each submitted a design that was evaluated by FDEP selected engineers, remedial action specialists, and O&M specialists. MACTEC received the top ranking. MACTEC has received additional awards for our innovative designs of remedial systems such as: an Engineering Excellence Honor Award from the American Consulting Engineering Council (ACEC), Florida Chapter and an Engineering Excellence Grand Award from the Florida Institute of Consulting Engineers for the design and construction of a barometric pumping system at Naval Air Station (NAS) Whiting Field. MACTEC was also presented a Grand Conceptor Award from the ACEC, Tennessee Chapter, for the design and construction of sediment retention traps using Gabions® for sediment containing Dioxin at Naval Construction Battalion Center, Gulfport, Mississippi. In addition, MACTEC received the Engineering Excellence Honor Award (ACEC, Florida Chapter) for a biosparging system using three horizontal wells approximately 700 feet long and 60 feet bls at a site in Havana, Florida.

In the winter of 2007-2008, MACTEC executed a model remediation project for the City of Orlando. Groundwater was contaminated by drycleaner solvents under the proposed footprint of the Orlando Events Center, now home of the Orlando Magic. With construction pending, the City sought a contractor who could remediate the groundwater to Drinking Water Standards (requiring a 99.95% reduction) within approximately 9 months. MACTEC, working with Geocleanse International, Inc. developed and implemented a plan to accomplish this aggressive schedule by injecting chemical oxidizers into the groundwater. MACTEC developed the Remedial Action Plan and secured its approval by FDEP in less than 3 weeks after contract award. We subsequently oversaw and monitored the chemical injections. All applicable groundwater standards were achieved within two months after the injectors were installed, exceeding the requirements of the contract schedule.

***Lead and Asbestos Surveys, Abatement, and Indoor Air Quality.*** MACTEC has conducted hundreds of asbestos and lead-based paint surveys, designs and oversees asbestos abatement projects for many customers throughout Florida, including the Florida Department of Management Services, Florida State University, Florida A&M University and the University of Florida. MACTEC and members of the proposed project team are Florida Licensed Asbestos Consultants, the critical certification required to provide these services

***Impaired Waters, TMDLs, BMPs.*** The MACTEC project team can also provide expert services to the County to assist in meeting the County's obligations under FDEP's Impaired Waters Rule, e.g.:

- Development of stormwater management plans.
- Evaluation of alternative Best Management Practices, including innovative technologies, such as:
  - Periphyton filters (recently evaluated for Orange County),
  - Constructed wetlands (recently designed for the City of Naples), and
  - Bioretention (recently recommended to the City of Maitland).
- Implementation of residential fertilizer ordinances and education programs.

***Other Environmental Consulting Services.*** Support in Research, Evaluation, and Drafting of Regulations and Ordinances

MACTEC offers planning services to our clients. MACTEC's planning experience includes research and writing local land use and development ordinances for local governments. We have completed unified development codes for two communities, and we are currently writing similar codes for two more. We also are on retainer with one County to manage their land development regulations by performing monthly reviews of requests for rezonings, variances, etc. Relevant experience includes:

- **FDEP Ichetucknee Trace Mining Reclamation and State Park Design** – Master Park Plan development, data collection, and park development, land use and topography reclamation plans, construction planning / permitting for redevelopment of Ichetucknee Trace mining site into area of state-owned recreational park.
- **Burke County, GA** – Developed zoning ordinance for unincorporated Burke County and an update to existing land development regulations. Both the zoning ordinance and land development regulations presented as a single document, the Burke County Unified Land Development Code. Preparing the county's first Unified Development Code (ongoing).
- **Cobb County, GA** – Master Plan for improvements to a park that included historic structures.
- **City of Kennesaw, GA** – Design service in support of development of 2,600-foot community trail integrated into existing neighborhood park.
- **City of Kennesaw, GA Unified Code Development** – Consolidated over 700 existing codes, regulations, and guidelines and one new regulation into one central document.

***Community Relations Support.*** MACTEC's senior and principal professional assigned to this project are experienced in presenting technical information at public meetings, and our desktop publishing expertise (described further in a following paragraph) is available to support Leon County in preparing brochures, fact sheets, and slide shows.

***Staff Training.*** Common keys to success in training are:

- Effective communication formats – MACTEC uses Microsoft PowerPoint slide shows with handouts. The slides must be designed attractively with a limited amount of text per slide, with large fonts. Photos, charts, animation, and cartoons can be effective to maintain interest. Handouts can provide additional details for the employee's file, covering additional information. Fact sheets, for example, showing how to identify a protected species, should be one page and can be laminated.

- Understand the audience and use language they can understand. In some cases the audience may be very familiar with some jargon and acronyms, so they may be used judiciously in the training environment.

Additional keys to success in staff training are to keep the audience's attention by engaging them – ask questions; use photographs of their work areas to illustrate procedures and "dos and don'ts"; use humor; suggest hypothetical situations for discussion; take frequent breaks; outlaw cell phones. MACTEC's experience in training includes:

- Training construction crews on implementation of Stormwater Pollution Prevention Plans and Environmental Protection Plans;
- Training shop personnel on Clean Air Act Title V permit requirements, including National Emissions Standards for Hazardous Air Pollutants (NESHAP);
- MACTEC trains our own staff on health and safety procedures.

***Preparation of Maps and Technical Reports.*** MACTEC possesses and is experienced in using ESRI's ArcGIS 9.2 suite, including ArcInfo, ArcIMS, ArcSDE; ERDAS Imagine 9.2; Autodesk's AutoCAD 2009 and Bentley's Microstation V8; databases including Access, Oracle, and SQL Server; and programming languages include Visual Basic, Python, C++, and multiple web applications and scripting languages. Additionally, MACTEC's CADD and technical writing departments are integrated with the GIS capabilities to readily assist with any assignments. MACTEC also uses state-of-the-art desktop publishing software, including ADOBE Professional, Photoshop, and Microsoft Office Suite 2007 to produce attractive technical reports, using the latter's grammatical and spellchecking features to eliminate errors.

In addition to the standard ESRI ArcGIS modules, MACTEC has, and can use, the following ESRI extensions:

- Spatial Analyst
- CoGo
- Network Analyst
- ArcHYDRO
- Geostatistical Analyst
- 3D Analyst
- TIN/GRID
- Image Analyst
- ArcPublisher
- Survey Analyst

MACTEC uses ArcGIS to produce maps on nearly all environmental consulting assignments.

***Preparation of Regulatory Submittals.*** MACTEC's design assignments, including wetland restoration designs, BMP designs, recreational facilities and trails, and dredging projects always require MACTEC to prepare regulatory submittals for our clients. These have included NPDES permit applications, Environmental Resource Permit applications, incidental take permits (Threatened and Endangered Species Act), Title V permit applications. Consistently these assignments require response to Requests for Additional Information, until the regulatory authority issues the permit. MACTEC also submits Annual Operating Reports for all U.S. Navy Title V permittees in Florida and adjacent southeastern states, and has been providing this service for more than 5 years.

In summary, MACTEC's proven ability to provide a wide range of environmental support services is supported by the hundreds of environmental projects that we have successfully completed for a wide range of clients, be it State, Federal or private.

## *B3. Quality Assurance (QA)*

Quality work begins with planning and is supported by internal quality programs designed to ensure appropriate level of leadership, customer care, and technical competency which includes the use of current design standards, codes, regulatory guidelines/procedures and regulations. MACTEC has comprehensive and proven quality assurance/quality control (QA/QC) personnel, procedures, and systems to ensure proper execution of all programs and projects. Quality is a project deliverable.

MACTEC's established comprehensive Quality Assurance Program dates back to 1975 and is fully supported from the CEO down. The program is administered by the Director of Engineering & Science, who reports directly to the President. A full time Quality Assurance Manager, reporting to the Director of Engineering & Science, is responsible for the Quality Assurance Manual and implementation of the Quality Assurance program.

MACTEC has a long and dedicated history of treating quality as a project deliverable. We believe that customer satisfaction is also indicative of quality performance, and our successes in this area are described in the next section.

MACTEC's QA Manual explains all engineering and science policies and follows the criteria for quality assurance outlined in the Code of Federal Regulations, 10CFR50, Appendix B, in ASME NQA-1 and F.A.C. 62-160. The system applies to all disciplines and scope of services. Provisions are included for incorporation of project or client-specific requirements. Topics addressed by MACTEC's Quality Assurance Manual include:

- Design Control (including standards, codes, regulatory requirements)
- Process Control
- Inspection
- Procurement and Control of Purchased Items and Samples
- Instruction, Procedures and Drawings
- Measuring and Test Equipment
- Identification and Control of Items and Samples
- Quality Assurance Records
- Personnel Training and Qualifications
- Contract Review
- Document Control
- Ethics
- Identification and Control of Nonconforming Items and Samples
- Handling, Storage and Shipping of Items and Samples
- Corrective and Preventive Action
- Computer Software and Hardware Control
- Quality Improvement

MACTEC's staff professionals are provided with technical and quality training and are required to obtain appropriate certifications and registrations prior to becoming designated by a review committee as a Principal Professional. Principal Professionals are assigned for each project and/or subtask and are responsible for directing, reviewing, and approving services that require engineering or scientific evaluation, interpretation, or professional judgment.

A cornerstone of MACTEC's QA system is the requirement that all calculations and date generated is reviewed by a peer or supervisor; and that all reports reflecting evaluation, interpretation or judgment be reviewed and signed by a Principal Professional.

*"MACTEC's report is clear, well-organized, and thorough."*
*Charles K. Ross*
*Progress Energy Services*

MACTEC enforces a formal corporate-sponsored internal Quality Assurance audit program directed by the Corporate Quality Assurance Manager. The purpose is to ensure quality control for each project at an office level. The audit accomplishes the fundamental task of verifying that the services provided to clients are being accomplished in compliance with existing technical and quality requirements. The audit teams consist of senior and corporate level personnel, independent of the function being audited. Audit results are reviewed and corrective actions implemented when required by appropriate levels of management. This process serves not only as an assessment of the technical and quality achievement of the project but also provides for interchange of technological advancements within the company.

For this contract, independent quality assurance/verification will be the responsibility of the QA/QC Managers. Their primary responsibilities include:

- Auditing files and reports to verify that QC accomplished as required.

- Performing unannounced audits and surveillances of project activities to review field, laboratory, and office work plans and procedures.
- Following up on necessary corrective actions.

A fundamental tenet of MACTEC's QA program is the assignment of staff who are qualified to perform their specific assignments. Principal engineers and scientists are assigned to provide oversight and review of all project elements. Junior staff are trained and certified as competent prior to executing any SOPs that they are assigned.

***Corrective Action Procedures***

Prevention and resolution of problems requires careful advanced planning and close communications between management and technical personnel in both client and contractor organizations. Our project experience has taught us that problems normally can be anticipated and resolved before they occur. The combined experience of the project team (including subcontractors) allows identification and resolution of most potential problems in the planning stages of the project. Examples of planning activities that are very successful in resolving problems before they occur include: identifying backup personnel and equipment and negotiating terms and conditions with subcontractors such as penalty clauses for nonperformance. However, should a problem occur, our project manager, office manager, and corporate representatives such as Mr. Mark Diblin, PG, Vice President, are involved in the corrective action process. This level of management has the authority and experience to address problems and develop alternatives to eliminate impact on the project schedule, budget and objectives. Anticipated problems and recommended corrective action will be communicated immediately to the County project manager. MACTEC understands that the County expects to be kept informed at all times and we are committed to fulfilling that project requirement. The Tallahassee, Florida location of our project manager and key management and technical team representatives enhance our ability to effectively communicate and implement corrective action, as required.

## *B4. Resources*

MACTEC is uniquely qualified to assist the County in environmental support services. With over 400 personnel located throughout Florida in 9 offices representing over 50 scientific and engineering disciplines, MACTEC has all of the resources (staff and equipment) and technical disciplines required to complete a job of this type using in-house resources. Our in-house design services include: architectural services, recreational and park facility design, civil site design, bridge design, geotechnical engineering, structural design, pavement design, utility and power design, environmental engineering, value engineering and constructability review. Using in-house resources MACTEC can also provide surveying, utility locates, permitting, material testing and construction management services.

**Staffing**: With MACTEC's extensive multiple discipline capabilities, we are ready and capable of completing all of the environmental support projects tasked under this contract utilizing our in-house staff. This in-house turnkey approach typically saves our clients time and money. In addition to the civil engineering services, MACTEC can also provide these services to the County:

- Our facilities engineering services include building condition surveys, asbestos & lead-based paint management, indoor air quality, mold & mildew, life cycle cost studies for systems, mechanical, electrical & plumbing systems, roof and pavement evaluation & management programs and structural analysis.
- Our environmental services include site assessment and site remediation, comprehensive liability assessment and management, permitting, and underground tank management.
- MACTEC's risk assessment and ecology services include human health & ecological risk assessments, natural resource damage assessments and management studies, wetlands and lake assessments.

- Water resource services include hydrologic and hydraulic engineering, modeling, stormwater management, water quality studies and watershed management.
- Land development services (excluding engineering services) include architectural and landscape architectural services, parks and recreation system planning, historic preservation, certified arborist, cultural resource surveys including in-house archeologists, and Phase I & II site assessments,
- Survey Services – MACTEC is registered as a surveying company with the Department of Business and Professional Registration and has been providing surveying and mapping services in the state since 1987.
- Additional Support Services include utility locate services, material testing laboratories and a toxicology laboratory.
- Communications, outreach and public education services are conducted by communication specialists comprised of accredited public relation specialists, writers/editors, graphic artists, Web designers, video producers and information specialists. Our resources are enhanced by our in-house facilities and equipment, including a broadcast-quality video studio, color printing capabilities, photographic laboratories and a high-volume production center.

**Equipment:** In addition to our technical staff resource capabilities, MACTEC maintains all of the equipment necessary to support our project personnel in the successful completion of projects. This equipment includes such things as vehicles, field test equipment and computer hardware and software. All of our equipment is maintained (calibrated, decontaminated, etc.) by trained MACTEC equipment technicians. Routine maintenance is performed at our Tallahassee office location according to MACTEC's QA/QC program. Expendable equipment is stocked in the Tallahassee office location. Preselected vendors have been identified for all expendables that might be needed for any project. These materials can be overnight shipped to any project location.

The MACTEC Tallahassee office maintains a full array of environmental sampling and monitoring equipment necessary for soil, sediment, sludge, surface water, air, and groundwater sampling programs.

Equipment categories include field analytical equipment, soil and groundwater sampling equipment, drum sampling equipment, air (ambient and personnel) sampling equipment and health and safety equipment. In addition to this equipment, MACTEC maintains a supply of expendable materials such as tubing, sample containers and preservatives at the Tallahassee location. A list of available equipment is supplied below.

**MACTEC**
**General Field Equipment and Instruments**

| Field Instruments | Pumps |
|---|---|
| pH meters (Lamotte Chemical Products Model Ha-pH meter and Myron L. Company Model EPII/pH) | Positive Displacement |
| Conductivity meters (Trimar Industries Model 333 Tripar Meter) | Submersible (turbine, helical rotor) |
| S-C-T meter (YSI Instruments) | Submersible (gear drive) |
| OVA | Bladder pump |
| Photoionization analyzers | **Suction Lift Pumps** |
| Flame ionization detector | Centrifugal |
| Portable gas chromatorgraphs (HNU Model 311) | Peristaltic |
| Data logger (ORS Interface Probe and ORS Model EL-200 GW Monitoring System) | **Geophysical Instruments (specialty equipment)** |
| Drager multi-gas detector | Global Positioning System |
| Methane meter | Earth resistivity |
| Hydrogen Sulfide meter | Ground penetrating radar |
| Explosimeter | Magnetometer |
| Oxygen indicator | Nuclear densiometer |
| Field grade thermometers | Seismograph |
| Water level indicators | **Miscellaneous Equipment** |
| Water level recorder | Surveying equipment |
| | Decontamination apparatus |
| | Boats with motors |

**MACTEC**
**General Field Equipment and Instruments—continued**

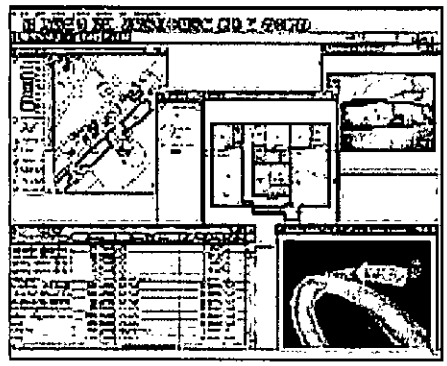
| | |
|---|---|
| **Sampling Equipment** | Stainless steel and Teflon mixing bowls and trays |
| Bailers, Teflon and stainless steel | **Heath and Safety Equipment** |
| Stainless steel and Teflon spoons, trowels, scoops, spatulas and buckets | Levels B, C and D protection |
| Surber sampler | Suits, Tyvek, Gloves |
| Van Dorn | Breathing apparatus, SCBA |
| Dip nets/kick nets | |
| Coliwissa tubes/glass tubes | |
| Hand augers | |
| Ponar dredge | |
| Soil corers (including DPT, KV macho system) | |
| Pumps (positive displacement and suction lift) –see below | |

The uses of the equipment are briefly described as follows.

- **Field Sampling Equipment:** soil and groundwater assessment.
- **Field analytical equipment:** field analysis for assessment and remediation.
- **Geoprobe Rigs:** soil and groundwater sample collection and well installation.
- **Specialty Equipment:** geophysical surveys, land surveying.
- **Personal protective equipment:** health and safety.
- **Remediation Equipment:** soil and groundwater cleanup.

Additional equipment is available from other MACTEC offices, our regional equipment warehouse or from preselected equipment supply rental companies. Equipment from these locations can be shipped overnight to any project site location.

Any specialty equipment such as geophysical equipment that is not available from the Tallahassee office can be readily obtained through other MACTEC offices or through equipment rental companies.



MACTEC also maintains 4-DPT (Geoprobe) rigs in Florida that are available for environmental, geological and geotechnical investigations. In addition, MACTEC also maintains a state-of-the-art utility locate rig. The Tallahassee MACTEC office has a mobile remediation system that is capable of conducting short-term groundwater air sparging and soil vapor extraction pilot tests and site cleanups.

All of our equipment is maintained (calibrated, decontaminated, etc) by trained MACTEC equipment technicians. Routine maintenance is performed at our Tallahassee office location according to MACTEC's FDEP CompQAP.

Expendable equipment is stocked in the Tallahassee office location. Preselected vendors have been identified for all expendables that might be needed for any assessment project. These materials can be overnight shipped to any project location. In addition, a water filtration system for "organic free" water is also maintained in the Tallahassee location for equipment decontamination procedures.

**Hardware and Software.** MACTEC has extensive experience in the development and use of innovative GIS, CADD and information management systems. MACTEC utilizes the latest versions of AutoCAD™, including 2009, and its vertical applications, Map and Land Desktop™, in the preparation of project design drawings and certified record architectural /engineering drawings including as-built condition drawings. We have over 100

CADD/GIS specialists who are trained and experienced in the latest versions of CAD and GIS software such as AutoCAD, Mircrostation, ArcGIS and Geomedia. Licensing for these applications is shared across the company wide area network (WAN). This enables CAD operators in any MACTEC office to access all design/drafting software. CAD software is installed on workstations running the Microsoft Windows XP® operating system and connected to servers in each office running Microsoft Windows Server®. MACTEC also utilizes MicroStation V8™ and its vertical applications such as GEOPAK® and InRoads® and they are network licensed in the same fashion as our AutoCAD applications. Through these varied platforms, operating systems, and network configurations, MACTEC is capable of meeting the County's program specific requirements.

**Design Standards.** MACTEC routinely creates design drawings using the U.S. National CAD Standard (NCS) or other standards as directed by the client. The NCS coordinates the CAD requirements of multiple organizations. The NCS was created through consensus with public and private organizations and the entire building construction community. The standard includes guidelines and standards for sheet layout, drawing conventions, schedules, symbols, and layer and plotting guidelines. Having been peer-reviewed by the construction community these standards provide contractors with clear and concise direction.

Standard design details as well as master specifications are maintained on the company ActiveProject web site for engineering design. Design modules are also maintained for engineered systems that are commonly applied for facility engineering. Mechanical, electrical, structural, architectural, and civil site works are controlled by facility design engineers that are well practiced in the particular discipline. The Discipline Lead maintain links to manufacturers and the construction community to revise the standard as new or better methods are developed. Design drawings are developed under the direction of a licensed professional engineer and then reviewed and approved by the manager of design before issuing to the client. Mark-ups are systematically reviewed by the CADD checker prior to plotting. Interdisciplinary coordination is managed by a quality assurance coordinator assigned by the manager of design.

**GIS and AIT**. MACTEC also offers high quality consulting services to assist in the design, development, and implementation of Geographic Information Systems (GIS) using ArcView software for environmental, engineering, land use planning, and other complex problems that require the use of modern tools to meet the needs of today's decision makers. By combining information technology experts with engineers and scientists who are familiar with the needs of our public and private sector clients, MACTEC is able to offer cost-effective solutions for the growing demand for infrastructure and environmental concerns faced by local governments, federal agencies, and private organizations across the country.

MACTEC also provides applied information technology (AIT) services through a collaboration of computer technology specialists located throughout our network of offices. We provide clients with cost effective data management tools that increase the value of their data investment while making the data more useable and accessible. The collection of technologies used by MACTEC's AIT professionals include database, GIS, GPS, CAD, web programming, geophysics, 3D visualization, and general application programming. Specifically, MACTEC is capable of producing, converting and translating its graphical images to Intergraph, MicroStation, or AutoCAD file formats. Our CADD workstation platforms running a broad array of CADD applications will allow a seamless transfer of files from and/ or to the County.

MACTEC has the staff resources and experience to assist the County in maximizing the number of projects that can be successfully implemented under this contract given the current limited budgets available. Our staff includes registered engineers and geologists as well as scientists and technicians. MACTEC's full service staffing and equipment capabilities will allow for comprehensive field-to-finish capabilities, from project "concept to completion".

| EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT | EXAMPLE PROJECT KEY NUMBER |
|---|---|
| | 1 |

NAME AND LOCATION OF PROJECT *(city and state)*

**Contaminated Soil Remediation, Capital City Bank**
**Tallahassee, Leon County, FL**

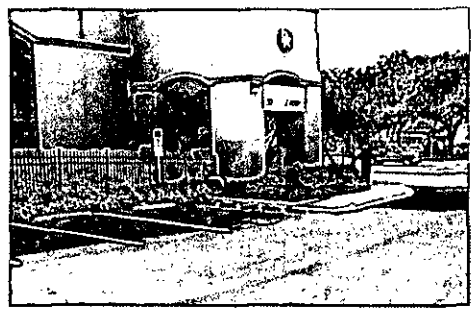
YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| January 2011 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT REPRESENTATIVE'S NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Nick Garmon, Capital City Bank | Capital City Bank<br>1860 Capital Circle NE<br>Tallahassee, FL 32308 | 850.402.7140 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT



Following the successful free-product recovery multi-phase extraction (MPE) events, a Remedial Action Plan (RAP) was prepared for the Capital City Bank site located at 217 North Monroe Street in Tallahassee, Florida to present a plan for the remediation of petroleum contaminated soil and groundwater. MACTEC proposed to remediate petroleum contaminated soil (vadose and smear zone) at the Capital City Bank site using soil excavation and petroleum contaminated groundwater using natural attenuation monitoring. The objective of the RAP was to reduce site soil contaminant concentrations to below the soil cleanup target levels and site baseline groundwater contaminant concentrations by 90% toward the groundwater cleanup target levels, as defined in Chapter 62-770, Florida Administrative Code.

Source removal activities were conducted in December 2010 and January 2011. The source removal consisted of a combination of conventional excavation and excavation using Large Diameter Augers (LDA). The conventional excavation was completed to a depth of approximately 10 feet and measured approximately 12 feet by 38 feet. Approximately 364 tons of petroleum impacted soil was excavated from this area.

A total of 126 LDA boreholes were completed to depths ranging from 32 to 34 feet bls utilizing a 5-foot diameter auger. Soil samples were collected from the bottom of each borehole and screened for organic vapors using the OVA. Upon completion, each LDA hole was backfilled with self-compacting flowable fill material. The backfill material was mixed onsite at a staged concrete batch plant prior to being placed in the excavated boreholes.

Approximately 5,413.73 tons of petroleum impacted soil was excavated from the CCB site. All excavated soil was transported for disposal to the Decatur County landfill in Decatur, Georgia. Confirmatory soil samples were collected from the excavation sidewalls and bottom for laboratory analysis.

Post-active remediation monitoring of groundwater is currently taking place at the site. Based on the results of the groundwater monitoring, additional remedial action of residual groundwater contamination may be necessary.

KEY PERSONNEL

| | PERSONNEL NAME | PERSONNEL NAME | PERSONNEL NAME |
|---|---|---|---|
| a. | Geoff Schaefer, PE, Project Manager | Cory Vowles, Staff Scientist | Harry Hooper, Env. Scientist |
| b. | Eric Blomberg, PG, Principal | Patrick Craine, Senior Technician | George Burton, CADD |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 2

NAME AND LOCATION OF PROJECT *(city and state)*: Phase I Environmental Site Assessment DRP /Natural Bridge Battlefield State Park Addition Gerrell Property, Leon County, Florida

YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(if applicable)* |
|---|---|
| June 2011 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Donna Ayres | Florida Department of Environmental Protection<br>3900 Commonwealth Boulevard<br>Tallahassee, FL 32399-2400 | 850.245.2676 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

Florida Department of Environmental Protection - Bureau of Land Acquisition tasked MACTEC to perform a Phase I Environmental Site Assessment (Phase I ESA) of the DRP / Natural Bridge Battlefield State Park Addition Project located approximately 6.5 miles east-southeast of Woodville, Leon County, Florida.

The Site is comprised of four disjunct undeveloped parcels with a total approximate acreage of approximately 55.06 acres. Three parcels located on the west side of the St. Marks Spring run are, north to south, 3.09 acres, 0.37 acres, and 0.26 acres. The 0.37-acre and 0.26-acre parcels are located on a small island. One parcel located on the east side of the St. Marks Spring run is approximately 51.08 acres. The 55.06-acre Site is part of a 70.67-acre parcel identified by Parcel number 3429202220000 in the Leon County Property Appraiser database. The current owner is Gerrell Plantation, Inc. The approximately south 2/3rd of the east boundary of the Site is bordered by a 40-foot wide easement of ingress and egress identified as Jim French Road, a single lane unimproved road.

The purpose of our services was to identify Recognized Environmental Conditions (RECs) in connection with the Site, based on readily available information and site observations. This assessment was performed substantially as outlined in the FDEP-BLA Task Assignment Number 246; DRP / Natural Bridge Battlefield State Park Addition project, Gerrell Plantation, Inc. property dated January 31, 2011, the FDEP-BLA's Exhibit B; "Standards for Environmental Site Assessment Services, Division of State Lands, Instructions for Environmental Assessments, Scope of Services Required in Performing the Phase I Environmental Assessment", and the scope and limitations of American Society of Testing and Materials (ASTM) E 1527-05.

KEY PERSONNEL

| | | |
|---|---|---|
| a. | PERSONNEL NAME<br>Jack Davis, Project Manager | PERSONNEL NAME<br>Harry Hooper, Environmental Scientist |
| b. | PERSONNEL NAME<br>Ron White, PG, Professional Geologist | PERSONNEL NAME<br>George Burton, CADD |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 3

NAME AND LOCATION OF PROJECT *(city and state)*: **Phase I and II Environmental Site Assessment Alatex Building, Florida A&M University, Crestview, Florida**

YEAR COMPLETED

PROFESSIONAL SERVICES: June 2009

CONSTRUCTION *(If applicable)*: N/A

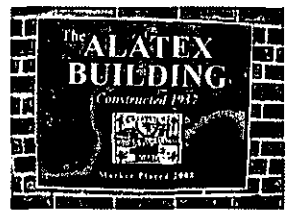
PROJECT OWNER'S INFORMATION

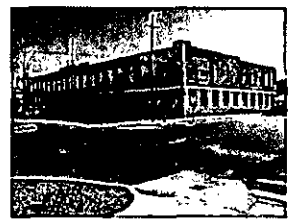
PROJECT'S REPRESENTATIVE NAME: Bari Shepard, Environmental Coordinator

ADDRESS: Florida A&M University
Plant Operations and Management
2400 Wahnish Way, Room 120
Tallahassee, Florida 32307

TELEPHONE NO.: 850.599.8021

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT



The Alatex building was a former textile mill located near downtown Crestview, Okaloosa County, Florida. The property is going to be developed by FAMU to be a satellite campus.

As a prerequisite to accepting ownership of the Alatex property, Florida A & M University (FAMU) requested that a Phase I ESA and an asbestos/lead-based paint assessment be conducted at the property that meets the FDEP requirements for performing environmental assessment surveys. Plans for the building include occupancy after renovations have been completed.

The objective of the Phase I ESA is to identify recognized environmental conditions associated with the subject parcel. The Phase I ESA was conducted in material compliance with those requirements established by FDEP, Division of State Lands, Bureau of Land Acquisition and applicable parts of ASTM International in E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. As a result of the Phase I ESA, a Phase II ESA was conducted to assess the soil and groundwater quality around a heating oil UST.

KEY PERSONNEL

a. PERSONNEL NAME: Jack Davis, Project Manager

PERSONNEL NAME: Harry Hooper, Environmental Scientist

b. PERSONNEL NAME: Ron White, PG, Professional Geologist

PERSONNEL NAME: Jim Marsh, Asbestos Inspector

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 4

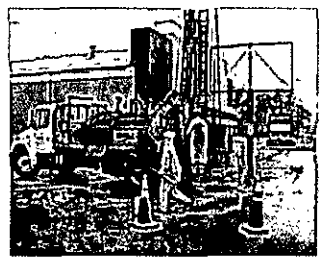
NAME AND LOCATION OF PROJECT *(city and state)*: Phase I and II ESA and Source Removal, Salie Property Tallahassee, Leon County, FL

YEAR COMPLETED — PROFESSIONAL SERVICES: June 2006 — CONSTRUCTION *(If applicable)*: N/A

PROJECT OWNER'S INFORMATION

| PROJECT REPRESENTATIVE'S NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Joe McGarrity, FDEP Site Manager | Florida Department of Environmental Protection<br>2600 Blair Stone Road<br>Tallahassee, FL 32399-2400 | 850.245.8979 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT



The City of Tallahassee, in coordination with a citizen's group of area property owners, neighborhood groups, business operators, and others, have developed and approved the Gaines Street Revitalization Plan. This plan calls for the intense urban development of the Gaines Street corridor with a variety of complimentary uses, including residential, retail, commercial and cultural. The Salie Property site is located within the Gaines Street corridor.

In 2005 MACTEC Engineering and Consulting Inc. (MACTEC) conducted a Phase I and II Environmental Site Assessments (ESAs) at the Salie Property site in Tallahassee, Leon County, Florida to evaluate and characterize Recognized Environmental Conditions (RECs). The work was conducted under the FDEP Targeted Brownfields Assessment program for the City of Tallahassee.

The Salie Property site is located on the south side of Gaines Street at the intersection of Gay Street in Tallahassee, Florida. The Salie Property site is approximately 5.07 acres and is an irregular shaped lot that consists of five parcels of land.

MACTEC collected groundwater and soil samples during the Phase II ESA for field screening and laboratory analysis to characterize and assess the presence and extent of hazardous materials in the environment discovered during the Phase I ESA. The ESA was conducted to assess whether or not potential site contamination poses an unacceptable risk to human health and the environment and requires further consideration or a response action or recommend that no further investigation is appropriate.

RECs that were investigated during the Phase II ESA include vehicle maintenance ramps, an underground storage tank (UST) area, the former maintenance building, the historical railroad spur, a soil pile, the area of the former planing mill and areas located near the edge of the property to assess if contamination may be migrating onto the property from potential offsite sources.

A direct-push technology (DPT) rig was utilized to collect soil samples from 57 boring locations for field screening and analytical purposes. This information was used to evaluate the soil exposure pathway and delineate contamination in onsite soil and groundwater, 41 soil samples were collected for laboratory analysis. Additionally, groundwater samples were collected from seven newly installed monitoring wells for laboratory analysis.

Based on the analytical results soil contamination was present at the Salie site above the State's Soil Cleanup Target Levels (SCTLs). Total recoverable petroleum hydrocarbons (TRPH) and chromium were detected at the vehicle lift area. Arsenic was detected in soil samples collected from the railroad spur. Benzo(a)pyrene was detected in the soil pile. Groundwater contamination was not discovered at the site.

Based on the Phase II findings MACTEC contracted Big Bend Environmental Inc. to conduct source removal activities at the vehicle lift area on June 6th and 7th, 2006 at the vehicle lift area. Based on the OVA screening data and the laboratory analytical results, 419.14 tons petroleum contaminated soil was removed by Big Bend from the former vehicle lift area.

The large soil pile located at the western edge of the property was also excavated and removed from the site. The soil pile was removed to the natural land surface with a front-end loader and loaded into trucks and transported offsite for disposal. Three dump trucks removed an approximate 81.15 tons of soil from the pile.

KEY PERSONNEL

| | | | |
|---|---|---|---|
| a. | PERSONNEL NAME<br>Ron White, PG, Project Manager | PERSONNEL NAME<br>Eric Blomberg, PG, Principal | PERSONNEL NAME<br>Jason Burkett, Sr. Technician |
| b. | PERSONNEL NAME<br>Geoff Schaefer, PE, Senior Engineer | PERSONNEL NAME<br>Patrick Craine, Sr. Technician | PERSONNEL NAME<br>George Burton, CADD |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 5

NAME AND LOCATION OF PROJECT *(city and state)*: Horizontal Well Groundwater Remediation, Metro Shell, Tallahassee, Leon County, FL

YEAR COMPLETED

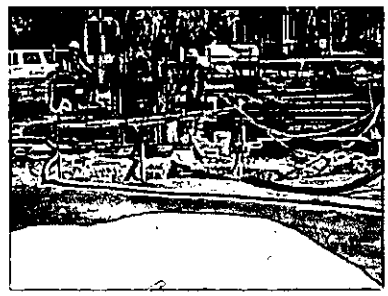
| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| November 2009 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Nick Contos, FDEP Site Manager | Florida Department of Environmental Protection<br>2600 Blair Stone Road<br>Tallahassee, FL 32399-2400 | 850.245.8914 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

The Metro Shell site is located at 302 North Monroe Street on the northwest corner of the intersection of North Monroe and Tennessee Streets, in Tallahassee, Florida. The Metro Shell site has dispensed gasoline for over 60 years. In January 1990, during the replacement of the USTs, excessively contaminated soil was discovered. A contamination assessment identified an area of excessively contaminated soil just south of the former pump island that extended from land surface to the water table at approximately 25 feet below land surface (bls). The assessment also identified extensive groundwater contamination above cleanup target levels in the shallow and deeper groundwater zones and identified upgradient and offsite sources of contamination at the BP station located east of the site and the Capital City Bank property located southeast of the site.



The groundwater contaminant plume stemming from the Metro Shell site source area covers the entire site and the majority of the 300 Block of West Tennessee Street extending to the north-northwest approximately 300 feet. In addition to the onsite groundwater contamination two adjacent upgradient sources also exist (BP station and Capital City Banks). The groundwater plume size of all of these site together comprises an area of approximately 400 feet by 800 feet. MACTEC designed a Soil Vapor Extraction (SVE) system to address the Metro Shell source area and horizontal biosparge wells to address contamination in the shallow perched groundwater zone and the portion of the deep perched groundwater zone above the confining clay layer. Biosparging with horizontal wells was selected for this site based on the available data, site conditions, and cost comparisons for the following reasons: (1) the dense downtown area prevented the installation of a vertical treatment system without large "holes" in the groundwater treatment area, where as horizontal wells would give almost complete coverage of the groundwater plume; (2) the geology was conducive to either air or bio sparging, however the use of biosparging eliminated the need for vapor recovery over the entire area of the groundwater plume; (3) the use of biosparging would aid in the remediation of the upgradient sites as well as the downgradient sites without effecting the remedial options of the contractors working on the upgradient sites; (4) the system requirements for a biosparge system were less than any of the other types of proposed alternatives, which would result in lower O&M costs over the duration of the remediation.

The SVE/biosparge system was installed in 2004. Due to the "downtown" location, much of the system installation activities were conducted during the night to avoid disruption of local businesses and traffic. The horizontal biosparge wells were installed using conventional mud rotary horizontal drilling techniques. The two wells were installed to maximum depths of 86.51 feet and 86.30 feet bls, respectively. The total boring lengths for each of the wells were approximately 1340 feet. The remediation system was successfully started in July, 2004.

Significant decreases in groundwater contaminant concentrations in downgradient and cross gradient monitoring wells have been observed during recent sampling events. Overall, the performance of the SVE and biosparge systems is as expected and meet design parameters.

KEY PERSONNEL

| | PERSONNEL NAME | PERSONNEL NAME | PERSONNEL |
|---|---|---|---|
| a. | Geoff Schaefer, PE | Dusty Tarver, Technician | Mark Uanino, Technician |
| b. | Narayanan Raghupathi, PE, Senior Engineer | Harry Hooper, Technician | |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 6

NAME AND LOCATION OF PROJECT *(city and state)*: **Dual Phase Extraction Groundwater Remediation Havana Antique Center, Havana, FL**

YEAR COMPLETED

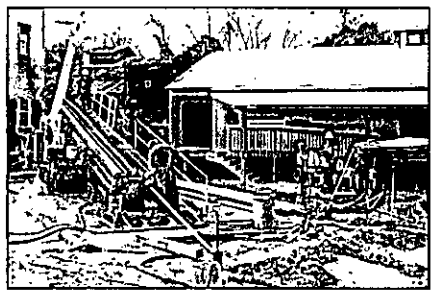
PROFESSIONAL SERVICES: September 2009

CONSTRUCTION *(If applicable)*: N/A

PROJECT OWNER'S INFORMATION

| PROJECT'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Ms. Melike Altun, FDEP Project Manager | Florida Department of Environmental Protection<br>2600 Blair Stone Road<br>Tallahassee, FL 32399-2400 | 850. 245.8868 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT



This project description describes remedial measures for a large groundwater plume (approximately 500 feet wide and 1,000 feet long) that covers the majority of historic downtown Havana, Florida and how MACTEC got the approval of the local community. The majority of the contamination emanated from underground storage tanks at Havana Texaco, which is located in the southern part of the plume area. The groundwater contamination is 40 to 60 feet beneath the land surface in the shallow aquifer.

Because the remedial system was to be in a historic area, MACTEC conducted a meeting and site walkover with FDEP representatives, the town manager and property owners. The meeting was held to discuss remedial options with stakeholders and select a system that blended in with the surrounding area and limited construction in the downtown area.

The treatment system consists of a DPE system to aggressively remediate the source area and a biosparging system to remediate the groundwater plume. Delivery of air for the biosparging system is through three horizontal wells (approximately 700 to 800 foot long and 60 feet bls) to minimize the need for numerous vertical wells and piping in the historic downtown district.

The DPE system consists of 7 wells that will use high vacuum to cutoff the contamination in the source area. An oil sealed high-vacuum pump will be used to extract petroleum from the vadose zone and capillary fringe, and the petroleum contaminated groundwater. Recovered groundwater is treated using a low profile air stripper and recovered vapors from the vadose zone and air stripper will be treated using a thermal oxidizer.

The horizontal wells (approximately 700 to 800 foot long) for the biosparging system were installed at depths ranging from 57 to 61 feet bls with screen sections ranging from 100 to 250 feet. The horizontal wells were installed to make a oxygen-enhanced linear flow-through barrier. The goal of the biosparging system is to create the optimum environment for microorganism growth and treat the groundwater as it flows naturally through the aquifer. The effectiveness of the biosparging system relies on the systems ability to volatilize dissolved-phase organic compounds, increase the mobility of organic contaminants adsorbed to the aquifer matrix, and increase the biological activity of microorganisms by providing oxygen. Oxygen will be an electron acceptor for growth of microorganisms that will consume the hydrocarbons.

KEY PERSONNEL

| | | | |
|---|---|---|---|
| a. | PERSONNEL NAME<br>Geoff Schaefer, PE, Project Manager | PERSONNEL NAME<br>Cory Vowles, Staff Scientist | PERSONNEL NAME<br>Mark Uanino, Staff Scientist |
| b. | PERSONNEL NAME<br>Eric Blomberg, PG, Principal | PERSONNEL NAME<br>Patrick Craine, Senior Technician | PERSONNEL NAME<br>Harry Hooper, Env. Scientist |
| c. | PERSONNEL NAME<br>Ron White, PG, Geologist | PERSONNEL NAME<br>Jason Burkett, Senior Technician | PERSONNEL NAME<br>George Burton, CADD |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 7

NAME AND LOCATION OF PROJECT *(city and state)*

**Horizontal Air Sparge and Soil Vapor Extraction Groundwater Remediation, Country Corner Shell, Tallahassee, FL**

YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| June 2009 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Charles Rooney, President | Rainey Cawthon Fuel Oil<br>601 W. Madison Street<br>Tallahassee, FL 32304 | 850.222.1948 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

MACTEC installed an air sparge (AS), soil vapor extraction (SVE) and multiple phase extraction (MPE) system at the Country Corner Shell site under the Petroleum Preapproval Program. The remedial design called for four horizontal AS wells, paired up with four horizontal SVE wells, to address groundwater plumes migrating in opposite directions from a local groundwater divide beneath the subject site. The horizontal wells were designed to operate in conjunction with a vertical well system comprised of 24 MPE, 19 AS, and three SVE wells. Chemicals of concern (COCs) include included volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and total recoverable petroleum hydrocarbons (TRPH).

The goals of the horizontal well design were to develop a complete zone of influence around the horizontal wells, and to remediate the large MTBE plume and prevent its further migration. MACTEC's design achieves this goal by meeting a series of engineering challenges: It achieves even flow distribution along the entire length of the horizontal well screens; specifies optimal equipment sizing; and defines an appropriate operation and maintenance program. Horizontal AS and SVE were designed for flows from 140 to 250 scfm, and 300 to 600 scfm, respectively. Construction challenges included installing 600 to 800 foot long horizontal wells at depths of up to 49 feet.

Concentrations of COCs have declined by 98 to 99 percent over the 42,722 sq. foot plume during the first five quarters of system operation, and they are expected to fall below regulatory limits (SCTLs and GCTLs) within 2 years.

KEY PERSONNEL

| | PERSONNEL NAME | PERSONNEL NAME | PERSONNEL NAME |
|---|---|---|---|
| a. | Angela Finney, Project Manager | Narayanan Raghupathi, PE, Engineer | Richard White, Technician |
| b. | Eric Blomberg, PG, Principal | Ron White, PG, Geologist | Mark Uanino, Technician |

| EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT | EXAMPLE PROJECT KEY NUMBER |
|---|---|
| | 8 |

NAME AND LOCATION OF PROJECT *(city and state)*

**Soil Remediation Source Removal**
**Florida State University Schools**
**Tallahassee, Leon County, FL**

YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| July 2007 | N/A |

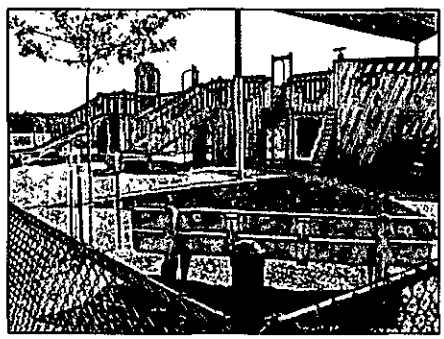
PROJECT OWNER'S INFORMATION

| PROJECT REPRESENTATIVE'S NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| T. Neal Trafford, Principal | 3000 School House Road, Tallahassee, Florida 32311 | 850.245.3873 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

Through MACTEC's relationship with Florida State University's Environmental Health and Safety Department, the Tallahassee office had the opportunity to make a difference in the lives of school children at the Florida State University School (FSUS) for Grades K through 12. After hearing about the potential health concerns related to wooden playground equipment pressure preserved with a copper chrome arsenate (CCA), a member of the FSUS parent teacher association collected two wipe samples off the wooden equipment and two soil samples from the vicinity of the playground equipment. Concentrations of arsenic in the wipe and soil samples exceeded USEPA acceptable cancer risk rates and the playground was shut down, dismantled, and disposed. The school immediately began a campaign called "We Have a Dream" to raise money for a new playground and assemble a team of volunteers to build the playground.

Before a new playground could be built, the arsenic contaminated soil needed to be assessed and remediated. The costs of the assessment and cleanup were going to be subtracted from the total amount budgeted for the new playground. Therefore, to get the biggest playground for the children, it was imperative to minimize the cleanup costs. Several MACTEC employees in the Tallahassee office volunteered their time and expertise to assess contaminated soil at the playground and develop a remediation plan. A contract was prepared by MACTEC and signed by FSUS to cover the analytical and reporting costs for the project.



One Saturday in February 2007, MACTEC employees collected 48 soil samples from 24 locations for arsenic analysis. The area was successfully delineated and all that was left was to excavate and dispose of the arsenic contaminated soil. After being requested to submit a bid to conduct the soil excavation, MACTEC subcontractor Tommy Watts of Big Bend Environmental Services volunteered to conduct the cleanup at no cost. Approximately 73 tons of arsenic contaminated soil was excavated in June 2007 under the oversight of MACTEC and the site was cleared for playground construction.

Arsenic-contaminated area of playground before and during soil removal

Needless to say, the school was elated and made MACTEC and Big Bend Environmental Gold Level Sponsors for the playground construction. The playground construction was completed over the Martin Luther King Jr. holiday weekend in February 2008 by over 500 volunteers who proudly wore t-shirts with the MACTEC and Big Bend Environmental logos.

KEY PERSONNEL

| | | | |
|---|---|---|---|
| a. | PERSONNEL NAME<br>Eric Blomberg, PG, Project Manager | PERSONNEL NAME<br>Pat Craine, Technician | PERSONNEL NAME<br>Richard White, Technician |
| b. | PERSONNEL NAME<br>Jack Davis, Principal | PERSONNEL NAME | PERSONNEL NAME |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 9

NAME AND LOCATION OF PROJECT *(city and state)*: Conservation Easement Monitoring Millstone Plantation Conrad Property, Leon County, Florida

YEAR COMPLETED

PROFESSIONAL SERVICES: 2009

CONSTRUCTION *(If applicable)*: N/A

**PROJECT OWNER'S INFORMATION**

| PROJECT'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Jim Farr<br>Planning Manager | Florida Department of Environmental Protection<br>3900 Commonwealth Boulevard<br>Tallahassee, FL 32399-3000 | 850.245.2766 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT



Florida Department of Environmental Protection (FDEP) tasked MACTEC to perform a Conservation Easement monitoring of the Millstone Plantation located on the south side of Lake McBride, Tallahassee, Leon County, Florida.

The Site is comprised of two disjunct parcels with a total approximate acreage of 93 acres. The parcels are owned by Mr. Jack H. Conrad. Mr. Conrad, as Grantor conveyed the parcels to The Trust for Public Land (TFPL) as Grantee through a conservation easement deed with amendments in 2003. TFPL, as Assignor, assigned its interest in the conservation easement to the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida during the same year. The partially developed east parcel is comprised of upland mixed forest, dome swamp, and clastic upland lake habitats with unimproved pasture and planted pine tree areas. Structures on the east parcel include a historical tenant house, wood shed, remnants of a greenhouse and utilities. The undeveloped west parcel is comprised of upland mixed forest and a seepage stream (Millstone Creek). The west parcel contains an archeological site and the remnants of an earthen dam and mill site.

The purpose of our services was to monitor the property annually to verify compliance with the conservation easement deed assigned to the property by the FDEP. These monitoring activities were performed substantially as outlined in the FDEP Contract PL 033 and individually assigned task assignments for Millstone Plantation, Jack Conrad Parcel issued between October 1, 2004 and February 20, 2009, and the FDEP "Scope of Services for Monitoring Conservation Easements. Annual Assessments to Determine Compliance with Conditions of Conservation Easements for the Department of Environmental Protection, Division of State Lands".

**KEY PERSONNEL**

| | | |
|---|---|---|
| a. | PERSONNEL NAME<br>Jack Davis, Project Manager | PERSONNEL NAME<br>Harry Hooper, Environmental Scientist |
| b. | PERSONNEL NAME<br>Ron White, PG, Professional Geologist | PERSONNEL NAME<br>George Burton, CADD |

## C. Willingness to Meet Schedule and Budget Requirements

**Schedule and Cost Control:** Key to our project successes and satisfied clients is our ability to provide an integrated well managed approach involving teams of experienced engineers, scientists, technical and support staff who can deal successfully with every phase of a project lifecycle, from planning through design, permitting and construction management. MACTEC's project management approach and strategy for any project tasked to us by Leon County has been designed to maximize the efficient execution of each task and to ensure your satisfaction. Our management process is proven to be one of the most efficient processes for controlling numerous activities in a timely and cost-effective manner. These processes have been tailored to meet the individual needs of our clients. As a result of MACTEC's ongoing working relationship with many government agencies, the contract requirements for this project have already been incorporated into our project management system.

MACTEC believes that strong and effective management is the most critical component for successful completion of a project. At MACTEC, strong project management means:

- Listening carefully to our client's concerns before starting a project and asking probing questions to determine their specific objectives;
- Treating schedule and budget considerations as firm commitments, not just objectives;
- Communicating clearly and interacting frequently with the client, alerting the client to significant developments, work progress, budgetary issues, and other items of concern as soon as practical, with the goal of eliminating surprises; and
- Recognizing any internal staffing and technical limitations, and discussing these issues openly with the client to develop an appropriate response.

MACTEC's project management procedure and strategy for each component of a project is designed to maximize the efficient execution of each task and to ensure the County's satisfaction. Our management process has enabled MACTEC to consistently control numerous activities in a timely and cost effective manner for hundreds of clients on thousands of individual projects.

**a) Schedule Control:** Timeliness is a critical issue for our clients and is a key to completing projects within budget. Therefore, MACTEC is dedicated to meeting the agreed upon schedule of all explicit and implied commitments made to clients, without sacrificing the established scope, budget, and quality. MACTEC accomplishes schedule control through early and careful project planning, measuring performance against plan, evaluating corrective actions as needed, and communicating all information to our in-house project team as well as Leon County personnel in a timely manner.

Project resource needs (personnel, equipment, subcontractors) will be identified during the planning process. Every subtask of the project is evaluated from a resource and scheduling basis. A project schedule is formulated based on the County's needs and resource requirements. These resources are then committed to this project. In addition, alternative resources are also identified during the planning stage. During the planning process, we try to anticipate problem areas and develop contingency plans. Subcontractor performance-related concerns are reduced at the outset by our utilization of companies with whom we have historical relationships or utilization of constructed performance clauses, a value added component of our subcontractor management system.

Once a project schedule has been developed, the MACTEC Project Manager tracks the project schedule in a clear and concise manner utilizing one of MACTEC's data management systems, such as Microsoft's Project Manager software and our email software, Microsoft Outlook, to monitor the schedule of individual events.

Overall, our time tested schedule control system has allowed for the successful execution of work ranging from single-phased projects to multiple-site, multiple-task, and multiple-year programs. Under our assessment

contracts with the FDEP, Bureau of Land Acquisition, MACTEC has completed over 1,500 individual task assignments to date. Deliverables for these task assignments have been on time or early!

**b) *Cost Control:*** It is MACTEC's objective that each task assignment be completed at the lowest possible cost to the client. The first step in cost control is developing an accurate scope of work that details all of the resources needed to accomplish the immediate task and a detailed plan on how to accomplish the task in the most efficient manner. To develop this work plan, MACTEC relies on its senior staff of experienced, technically trained engineers and scientists. Our staff is qualified in planning, design and construction management and is experienced at managing those disciplines in Florida's rapidly changing environment.

MACTEC's ability to plan and design technically sound, cost efficient projects that meet our client's needs and to successfully implement them within the stated budget (and schedule) is based on the following factors:

*Technical Expertise:* MACTEC has all of the technical disciplines required to successfully execute projects assigned to us under the work cataegory "Environmental Support Services". Our staff also has the "real world" experience of conducting projects that require the same disciplines. These technical capabilities and experience enables MACTEC to develop project scopes that are technically sound and cost efficient. Examples of cost saving approaches that could be applicable to this contract include:

*Specialized Local Expertise:* During the past 28 years, MACTEC has been providing a wide range of assessment and remediation services throughout Florida. This experience has given us invaluable knowledge in regards to conducting site assessments when it comes to planning and executing a project from being familiar with permitting requirements of local agencies, to being familiar with the wide array of hydrogeologic conditions encountered throughout the State and the appropriate technologies to utilize for each. Our experience has proven to be an invaluable tool in developing a streamlined approach to conducting an assessment that saves time and saves money.

Additional factors that we believe enable MACTEC to execute technically sound and cost efficient projects include the following:

*Experienced/Qualified Staff*: The concept and design of site remediation plans associated with site cleanups must be constructible and affordable in Florida's construction marketplace. The key to a successful construction project in Florida is in a team being proactive rather than reactive. *MACTEC has a tremendous amount of experience in Florida dealing with contractors as construction managers and as designers*. This allows us to fully understand and anticipate potential fatal flaws that may come up in the design process, the bidding process, or the construction process. The following points outline effective and cost saving elements that we use to ensure a successful project.

*Construction Estimate:* The key to managing the construction bidding process is the development of an accurate and current construction estimate. Because of our experience in both design and construction, and more importantly our experience in Florida, we understand what it costs in today's market to build a project. We routinely prepare construction estimates for our clients based, not on 5 year old averages, but on empirical data obtained from recent, similar projects in the area.

*Knowledge of Construction Industry:* Through our management of construction contracts our staff has a great deal of knowledge of the state of practice in the construction industry. We know the contractors and their abilities as well as current issues that are affecting the industry, such as the pricing of construction materials and the unit costs that are being charged or the availability of materials such as concrete.

*Construction Project Management Abilities:* We know how to manage a construction project. We are currently managing several construction projects for the FDOT and FDEP. We can manage schedule, utility conflicts, maintenance of traffic, claims, weather, etc... We use established methods and guidelines like the Construction

Project Administration Manual to effectively manage projects.

*Support Services*: Time is a big factor during a construction project. A good team will anticipate potential delays and make provisions to alleviate them before they impact the schedule. MACTEC offers all of the support services that may be needed during both design and construction to reduce the turnaround time necessary to get a subconsultant activated. Our ability to offer survey, geotechnical services, archeological assessments, etc... and to have those resources activated immediately will ensure the project progresses smoothly. Our support services also include materials testing with fully certified labs, including asphalt plants.

*Procurement:* As a large Federal government contractor, MACTEC uses a government-approved process for procurement activities for all client contracts. The objective of the procurement activities is to prequalify and establish partnerships with pre-negotiated terms and conditions, including penalty clauses for nonperformance to assure that the terms and conditions and rates established are the most favorable to FDEP.

As part of our procurement process, MACTEC requires all of our subcontractors to satisfy stringent requirements for liability insurance coverage, health and safety compliance, quality assurance plus other client- or site-specific performance requirements. All final subcontract agreements include cost, schedule, required scope and performance measurements.

Once the procurement process has been completed the control of subcontractor performance from a quality, performance, and schedule standpoint is very critical to the overall success of the task assignment. Effective management of subcontracts is accomplished through early, clear definition of project objectives at the planning stage prior to start of the effort to re-affirm commitment to the schedule and work scope.

The subcontractor staff (and equipment) will be integrated as required into each assignment. Subcontractors will not be given independent assignments for accomplishment but will fully participate in the integrated MACTEC Team process. Subcontractor assigned staff will be technically and operationally controlled at the lowest possible level, to provide integration into the assigned activities.

*Project Execution:* Once the scope of work is developed, experienced personnel and appropriate technologies are assigned to the project. Our ability to routinely provide "local" resources to local projects also enables MACTEC to help minimize project costs to our clients. The next step in cost control during the project planning stage is to develop project schedules that keep costs down and optimize all phases of the project.

Once the scope of work has been defined, the appropriate resources committed to the project and a schedule established the final step in cost control is the actual project execution or simply stated doing what you said you were going to do! This involves executing the proposed plan with the appropriate resources and experience level to get the job done right the first time.

During project execution MACTEC will accomplish budget management and cost control through careful project execution, regularly measuring performance against the plan, evaluating corrective actions as needed, and communicating this information to the project team and client in a timely manner. MACTEC uses the Oracle® Financial System for direct electronic access and interaction with the company's main office accounting files.

PM Dashboard, an in-house project management tool allows our project managers continuous monitoring of the Oracle® Financial System. The PM Dashboard is rich with data and features, including links to other projects with similar information. This project management tool provides the project manager a set of Key Performance Indicators (KPIs) that alert the project manager to potential issues before they become problems. Project control is maintained by detecting any deviations from the original plan in the early stages allowing for corrective actions to be implemented. MACTEC has a consistent and documented history of successfully completing time and materials, firm fixed price and cost plus contracts for both government and private sector clients. By

following our tried-and-true cost control processes, we are confident that budgets for all of the projects tasked under this contract will be managed successfully.

*"...During the past six years, MACTEC has done outstanding work and the project has gone very well, and I am very pleased with the technical quality, schedule and client service that MACTEC provides. I am particularly pleased with their innovative approach to getting the job done economically & efficiently..."*

*Lynda Godfrey, Chief*
*Bureau of Land Requisition*
*Florida Department of Environmental Protection*

# D. Effect of Firm's Recent, Current and Projected Workload

Like any other consulting organization, our engineers, scientist and technicians work on multiple projects at any given time. With 3,000 associates located in 80 offices nationwide, our client base includes local, state and federal governmental agencies as well as private clients. For the past 28 years, MACTEC staff in our Tallahassee office has been continuously providing consulting services to the Florida Department of Environmental Protection. Under multiple contracts, MACTEC is currently providing services to the FDEP Program & Technical Support Section and Brownfields Section, Site Investigation Section, Office of Greenways and Trails, the Division of Waste Management, the Division of State Lands, and the Division of Recreation and Parks. In addition, we have just completed a trail connector study for the City of Tallahassee and an asbestos/lead based paint abatement oversight project for FAMU. Because the nature of our business necessitates working on multiple projects for multiple clients, MACTEC has the resources and management tools available to effectively manage staff and resources for working on multiple projects for multiple clients.

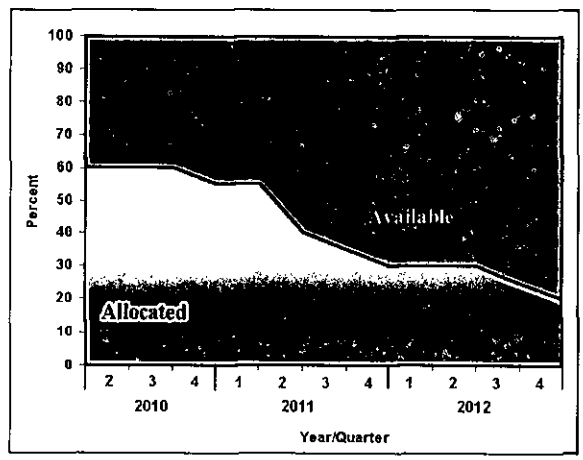
Our scientists, engineers, and technicians are available to meet the needs of the County as they arise under the contract. We are able to offer this availability due to our understanding of the project requirements, our experience in conducting similar projects, our project management support system (including state-of-the-art cost and schedule control systems), and our unmatched staff resource pool. MACTEC is committed to increasing the manpower available for this Contract by transferring associates from other project groups should the scope of any project under this Contract exceed our current contract resource projections.

***Staff Continuity***

MACTEC prides itself in the fact that there is very little turnover of our staff enabling us to keep qualified personnel dedicated to projects and programs for the extent of their contracts. The key personnel we have identified in our proposal are fully committed to assisting the County with a wide variety of environmental support services. As technical discipline leaders, they will provide leadership continuity throughout the project. During the early planning stages of the project as teams are formed, additional staff will be assigned based on technical expertise and availability. With over 3,000 associates and a proven management system, MACTEC has the resources and tools available to effectively manage staff continuity for this Contract. MACTEC continues to be excited about the chance to provide environmental support services to the County. You have our commitment that all identified MACTEC personnel are available throughout the life of the contract.

**Manpower Availability Chart**

***At the beginning of the project the combined availability of key MACTEC team members is approximately 60%. Our team is available to the County 24/7 to successfully support this project.***






MACTEC

***Total Workload During the Project Period***

Typically MACTEC's staff is approximately 30% available at any time. Firm contracted workload in March 2011 is approximately 65%, while we reasonably expect additional assignments in the short term. Based on these statistics, and MACTEC's understanding of Leon County's requirements, this level of availability exceeds Leon County's peak staffing requirements. Availability increases during the life of the contract. At the current time, we anticipate greater than 40% availability of the project team by September 2011. MACTEC can readily meet Leon County's needs on Day One and throughout the life of the contract.

MACTEC will assign key staff to the project with appropriate experience and has committed to Leon County that the appropriate experienced resources will be made available for this project as the need arises. MACTEC has committed each resource to a minimum of 25% of their time should the County need that person. That amounts to approximately 500 hours per person on an annual basis. This percentage can easily be increased based on a scoping need. Many of the project staff can be made available as much as 50% to 90% of the time and the senior technical staff can easily be made available 40% to 75% of the time based on the project needs. The most important item to take from this discussion is that all key staff is available and have sufficient availability to meet the County's project needs. Mr. Blomberg, the proposed project manager, will ensure that the right resources are made available throughout the established project schedule.

MACTEC fully understands that the County is looking for an engineering consulting firm that can provide the County with professional environmental support services for projects in Leon County. Our people are highly trained professionals. Our management and operating procedures have been developed and tested using "real" world experiences. With nine offices located in Florida and one of them within minutes of the County's offices, MACTEC has the resources in place to effectively execute this contract in a technically sound, cost effective manner. This formula for providing clients quality service in a timely manner has been proven to be successful by our many satisfied, "repeat" business clients. The MACTEC team proposed for this contract is capable of and committed to providing the County with all of the resources necessary to ensure that the County's environmental project needs are successfully accomplished.

# E. Effect of Project Team Location

## *Location*

MACTEC has maintained an office in Tallahassee for over 28 years. Our proposed project office for this contract work is our Tallahassee office. Additional staff resources and expertise are available from our other Florida offices as well as 80 additional offices nationwide. Staff located in these offices includes civil engineers, transportation engineers, geotechnical engineers, stormwater engineers, environmental engineers, geologists, environmental scientists, engineering technicians, CADD operators as well as survey crews, geotechnical crews, utility locate crews, and certified construction managers.

Mr. Blomberg is MACTEC's designated project manager for this Contract. Located in our Tallahassee office, Mr. Blomberg is located within 5 miles of the County's office. As project manager, Mr. Blomberg will be responsible for MACTEC meeting all of the program goals for technical quality as well as for meeting all financial and schedule commitments. His local presence facilitates "face-to-face" communication with COUNTY staff. In addition all proposed sub contractors are located within Leon County further facilitating "face-to-face" communication with the entire project team.

MACTEC is working on projects located around the world. To successfully accomplish this work, we have developed a technically strong staff, state-of-the art information system and project management procedures that allows us to collaborate with each other and produce quality deliverables no matter the project location. Being residents of Leon County, our Tallahassee staff have a working knowledge of the area and with our ability to access resources/expertise on a national level, we truly believe that we are perfectly located to provide the County the expertise, experience and resources to address environmental projects in a technically sound, cost efficient manner. If personnel from outside of the Tallahassee office are required, use of email, access to files by computer servers and ftp sites, conference calls and networked meetings facilitate routine networking and communicating across offices.

Our commitment to provide superior comprehensive services to the County is centered on the expertise and experience of MACTEC, which consists of a complementary mix of PhD's, principal scientists, senior level engineers, project engineers, experienced project managers, surveyors, technicians, and dedicated professional staff. MACTEC offers the County a unique resource base of individual strengths blended together into one Team. Accordingly, we can provide the full range of services required to complete the scope of this project in a seamless manner.

MACTEC is ready to hit the ground running in support of this contract. Our in-house facilities and effective management approach ensure projects performed by our professional engineers and scientists stay on schedule and are completed within budget constraints. We are confident that the knowledge and experience gained while working on projects similar in scope and complexity will enable a smooth execution of projects for Leon County. The local knowledge and experience with similar projects in Leon County, the understanding of local issues, and the desire to improve and maintain the quality of life in the area drive each team member to be highly responsive to the Leon County needs.

# F. Approach to the Project

## *Project Approach*

Leon County is requiring the services of a firm that can supply comprehensive environmental consulting services in support of the County's programs for site assessments, soil and groundwater remediation hazardous materials management, air and water quality protection and monitoring, land conservation, asbestos abatement, natural resources protection, development review and other regulatory initiatives. The work will be assigned on a task assignment basis. There is no guarantee of a specific level of effort, nor the specific types of specialists within the broad field of environmental consulting that the County may require. Consequently, the County requires the support of a diverse firm that can expertly address a wide range of environmental issues. MACTEC offers a diverse skill set of environmental professionals from our office in Leon County, with supplementary specialists available in additional Florida and southeastern U.S. locations.

Given these parameters and unknowns our general project approach is as follows: No matter the size or complexity of the project, MACTEC has learned that the key to a successful project is understanding the project requirements, identifying key issues, developing plans to resolve the issues and communicating the information. To achieve the above in a timely and cost effective approach, MACTEC approaches each and every project with a team concept in mind—the team being our in-house staff, sub-consultants, our client's staff, permitting agencies and other stakeholders affected by the project.

MACTEC believes the following elements are keys to the successful execution of any project:

1. A complete understanding of what is to be accomplished by the execution of the project.
2. A mutual understanding between MACTEC and our client as to the work scope and plan content.
3. Full knowledge of permitting issues and agencies.
4. Compliance with regulatory and safety standards.
5. Consideration of the ability to implement successfully implement the project components
6. Awareness of the time frame for project completion.
7. Adherence to project budget constraints.
8. Public involvement and input (as necessary).

With these issues in mind and the desire to address them, MACTEC will adhere to the following general outline in the execution of projects assigned to us under this Contract. It should be noted that the degree to which each element of this general outline is addressed will be dependent on the actual scope of work tasked by the County. Presented below is a description of MACTEC's general approach to project scope development and execution.

**Project Initiation**

- Establish communication procedures. Frequent and clear communication is critical to the development of project scopes of work that best meet the objectives of the County.
- Understand the County's preferences for management to include updates, reports, and meetings.
- Use an integrated team approach.
- Input by all stakeholders on technical issues and project management issues. Include public input when appropriate.
- Develop understanding of the County's plans and priorities for the specific project.
- Early identification of less obvious issues like site access and permit requirements.

- Establish project scope of work. Combined with MACTEC's knowledge of the regulatory requirements and MACTEC's technical experience, this scope of services will be developed into a superior scope of work that's both technically sound and cost effective.

**Project Execution**

For decades MACTEC has committed all the manpower and resources to consistently provide our clients with the type of responsive, quality environmental services that are consistent with project requirements. This is accomplished by assigning appropriately trained personnel, providing them the information, infrastructure and other tools they need to perform their assignment resulting in doing technically sound quality work right the first time! This approach to providing technically sound, quality services has resulted in long term working relationships with many clients including the water management districts, the FDEP and the City of Tallahassee. MACTEC pledges to provide all the manpower and resources necessary to meet all the County project requirements including scope and budget.

In summary, MACTEC's project team will draw on its wealth of similar project experience to tailor our approach to meet the specific needs (scope, schedule and budget) of any project assigned to us under this contract. The staff of MACTEC is genuinely excited about providing environmental support services for Leon County.

# PARKS AND RECREATIONAL FACILITY ENGINEERING

## A. Ability of Professional Personnel

MACTEC has all of the in-house expertise and technical resources to exceed the requirements of this contract. Every discipline required to successfully design parks and recreational facilities is available within MACTEC. Our diversified staff, which comprises specialists in over 50 scientific and engineering disciplines, builds and leads highly successful project teams that are dedicated to common goals. This wide range of in-house capabilities is an ideal match for the proposed task assignment contract, allowing Leon County staff to access virtually any engineering or scientific service without the costs and delays associated with adding specialized subcontractors.

Our expert staff brings in-depth technical knowledge and comprehensive field experience, thus eliminating the inefficiencies and costly learning curves of less-experienced engineering consulting firms or subcontractors. Key to our success is our ability to provide an integrated approach involving teams of experienced engineers, scientists, and technical staff who can deal successfully with every phase of a project life-cycle, from planning through design, permitting and construction management. Our ability to fully understand the requirements of a Contact of this scope is directly related to MACTEC's experience in conducting every discipline required to succeed from engineering design to permitting to coordination with all of the project "stakeholders".

Our proposed organizational structure is shown on the attached Organization Chart. MACTEC's designated project office for this Contract is our Tallahassee office.

The primary liaison for this contract is MACTEC's Project Manager, Mr. Larry "BEAR" Schenk. Mr. Schenk has more than 4 decades of experience in all aspects of parks, recreation, trails, natural resources, planning, design, construction, financing, programming and maintenance for local governmental agencies in Michigan, Colorado and Florida. This includes over 500 parks and facilities in over 15,000 acres of parks and over 300 miles of trails. Mr. Schenk was superintendent of parks and recreation in for the City of Tallahassee for over 15 years giving him an unmatched knowledge of local conditions. As Project Manager Mr. Schenk will be responsible for MACTEC meeting all of the contract goals for technical quality as well as for meeting all financial and schedule commitments.

MACTEC has provided on an Organizational Chart key discipline leaders for the technical disciplines inclduing Florida Registered Landscape Architects. The technical discipline leaders will be supported by a resource pool of over 400 Florida-based, experienced engineers, scientists, and technicians with the expertise to provide the services needed for the successful design and development of parks and recreational facilities. In addition, these staff will be supported by MACTEC's in-house support services including surveying, laboratories, drilling, field-testing, material testing and state-of-the-art data management capabilities. Finally, our Florida resources are backed by another 2,600 engineers, scientists, technicians and support staff located in MACTEC's 80 other offices. Through our integrated organizational structure, our Discipline leaders have the ability to draw upon the resources of any service group to provide solutions specifically tailored to meet the unique needs of any aspect of this project, whether it's across town or across the country. Resumes for these discipline leaders have been provided at the end of this section.

## MACTEC Team Availability Matrix

| *Key Project Personnel* | *Project Assignment* | *Years Experience* | *Availability (per year)* | |
|---|---|---|---|---|
| | | | Percent of Time | Hours Available |
| Larry (BEAR) Schenk, ASLA/CA | Contract Manager | 45 | 60 | 1,200 |
| Eric Blomberg, PG | Corporate Liaison | 23 | 20 | 400 |
| Jack Davis | Quality Assurance / Quality Control | 30 | 30 | 600 |
| René Schneider, PE | Civil Site Engineering | 30 | 60 | 1,200 |
| Charlene Stroehlen, PE | Drainage / Stormwater Management | 31 | 60 | 1,200 |
| Todd Boehmer, PE | Construction Management | 26 | 40 | 800 |
| Ed Czyscon, ASLA | Parks and Recreation Planning and Design | 35 | 30 | 600 |
| Ronald Huffman, RLA/AICP | Parks and Recreation Planning and Design | 27 | 40 | 800 |
| Charlie Phillips, ASLA | Parks and Recreation Planning and Design | 31 | 50 | 1,000 |
| Ann Shortelle, PhD | Mitigation Design and Permit | 23 | 40 | 800 |
| William Tucker, PhD | Mitigation Design and Permit | 33 | 50 | 1,000 |
| Michael Jones, PLS | Surveying | 36 | 40 | 800 |
| Vanessa Crisler | Plans Production | 25 | 50 | 1,000 |
| George Burton | Plans Production | 25 | 50 | 1,000 |

## *Subcontractors*

MACTEC is committed to provide the greatest participation possible for minority business enterprises (MBE) to compete as suppliers for MACTEC's current and long-term requirements. To assist Florida's small and minority businesses in doing business with County, City and the State of Florida and the private sector, MACTEC makes its best effort, whenever possible, to utilize MBEs through subcontracting, mentoring and direct award of goods and services. MACTEC extends fair opportunity for participation to MBEs consistent with applicable State of Florida regulations, Leon County policies, MACTEC policies and practices, and MACTEC's technical obligations under the contract. It is MACTEC's policy when price, quality, delivery, and other pertinent factors are evaluated as equal; the order should and is expected to be awarded to the MBE. In addition, MACTEC shall, whenever possible, assist in the training and development of MBE's in both the private and public sectors.

For outreach, MACTEC has accomplished and plans to continue to:

- Assist MBEs in understanding and meeting contracting needs, by providing training, mentoring attending conferences, and seminars.
- Obtain the County directory of MBEs capable of providing services and distribute this directory to all employees involved in the procurement process.
- Develop promotional campaigns to inform the MBE of the contract opportunities and its commitment to

involve such firms in its contracting activities.

- Develop/attend special events to meet special needs or concerns including contracting trade fairs, open houses, workshops, business socials.
- Target appropriate firms for participation in the training effort, provide mentoring to appropriate firms to teach MBEs the nuances of doing business with MACTEC.
- Coordinate events with applicable governmental entities and private/nonprofit organizations to meet MBEs and to develop business relationships.
- Continue working with FSU, FAMU and TCC to support minority student involvement in engineering and science disciplines.

MACTEC will continue its commitment to MBEs for this Contract with Leon County. Minority business enterprise specialty subcontractors that we have worked with in the past, are currently registered in our procurement system and will be called upon to participate are:

- **Environmental and Geotechnical Specialist, Inc.** EGS is an M/WBE firm that will provide geotechnical and environmental permitting services.
- **Florida Environmental and Land Services, Inc.** FLES is an M/WBE firm that will provide weltands and environmental permitting services.
- **Archeological Consultants, Inc.** Archeological Consultants Inc. is an M/WBE firm that will provide archeological and cultural resources assessment services that may be needed for a project.

Our approach to utilization of subcontractors is to fully integrate them into our project teams. We assign them specific tasks that are appropriate to their areas of expertise, allowing them to make meaningful contributions to the overall success of the project.

LEON

**MACTEC**
**Project Manager**
**Larry "Bear" Schenk, ASLA, CA**

**Corporate Liaison**
Eric Blomberg, PG

**Quality Assurance / Quality Control**
Jack Davis

**Civil/Site/Municipal Engineering**
Rène Schneider, PE

**Drainage / Stormwater Management**
Charlene Stroehlen, PE

**Parks and Recreation Planning and Design**
Ronald Huffman, RLA, AICP
Charlie Phillips, RLA
Edward Czyscon, RLA

**Mitigation Design and Permit**
Ann Shortelle, PhD
Bill Tucker, PhD

**Construction Management**
Todd Boehmer, PE

**CADD / GIS**
George Burton
Vanessa Crisler

**Surveying**
Mike Jones, PLS

**Subcontractor Team**

| Wetlands, Permitting | Archeological/Cultural Resources Assessments |
|---|---|
| EGS * – *Tallahassee*<br>Florida Env and Land Svcs * - *Tallahassee* | Archeological Consultants, Inc. * - *Crawfordville* |

* MBE Business Certified

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Laurence A. Schenk, ASLA, CA** | **Project Manager** | **45** | **4** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Master of Science, Natural Resources, Urban & Regional Planning, Michigan State University, 1968 Bachelor of Science, Park & Rec. Admin., Landscape Architecture, Urban Forestry, Michigan State University, 1965

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Certified Arborist, #SO-0861A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Mr. Schenk has more than 4 decades of experience in all aspects of parks, recreation, trails, natural resources, planning, design, construction, financing, programming and maintenance for local governmental agencies in Michigan, Colorado and Florida. This includes over 500 parks and facilities in over 15,000 acres of parks and over 300 miles of trails.

Three of the local governments won the coveted National Gold Medal Award for excellence in parks and recreation management. He was director, or superintendent of parks and recreation in each of these agencies. Southfield, Michigan (1966-1978), Colorado Springs, Colorado (1978-1988), Tallahassee, Florida (1994-2007).

He has written and administered over $100,000,000 in successful grants for park acquisition, facility development, trail development, artificial reefs, historic resources and forestry. He also has directed campaigns for bond issues and mileage issues and also for the Colorado State Lottery campaign which annually benefits parks and recreation agencies.

Mr. Schenk was part of the planning teams for Comprehensive Plans for Southfield, Michigan, Colorado Springs, Colorado, and Tallahassee/Leon County, Florida. He was responsible for the sections dealing with parks and recreation, conservation and natural resource protection and trails.

A critical skill that Mr. Schenk has, which is rare in the planning and design trades, is that he not only has been responsible for the planning and design of a great variety of park and recreation areas and facilities and trails, but he also has supervised the construction and follow-up operation and maintenance of these facilities. These skills insure that the client receives a plan or facility that is attractive and functional but also can be staffed and maintained reasonably.

## 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*

**City of Tallahassee, Parks and Recreation Department, Greenway Connection Study, City of Tallahassee, Leon County, Florida**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| Ongoing | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Planner:** Prioritize the Top Five trail connectors within the Tallahassee – Leon County Trail system as determined by trail advocates, trail planners, and managers.

Suggest specific alignments and alternate routes of the top priorities using current aerial photos, FEMA drainage maps, street maps, city and county owned properties and easement maps, development master plans.

List concerns, issues and possible solutions to acquire and develop the selected connectors once funding is secured.

Outline a trail maintenance classification system that could be used for determining future operational budgets for government owned greenways and trails.

Suggest possible funding sources for trail acquisition, development, and maintenance.

b.

(1) TITLE AND LOCATION *(City and State)*

**City of Tallahassee, Parks and Recreation Department, Four Points Trail Head, St. Marks Trail, Design and Construction Plans, Tallahassee, Florida**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2007 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Planner:** Mr. Schenk served as Park Planner for the planning and design of trail head facilities to serve the Tallahassee – St. Marks Historic Railroad State Trail in the Four Points area of Tallahassee. The project included construction plans for parking, a shelter, and other amenities for in-house construction by City staff. The project also incorporated principles of the Crime Prevention Through Environmental Design (CPTED) program.

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Laurence A. Schenk, ASLA, CA** | **Project Manager** | **45** | **4** |

**c.**

(1) TITLE AND LOCATION *(City and State)*

**Florida Department of Agriculture and Consumer Services Withlacoochee State Forest Croom Motorcycle Area RV Campground Master Planning, Brooksville, FL**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2007 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Planner:** Preparation and submittal of master plan for development of 50-unit RV campground area within 2,600-acre Croom Motorcycle Area of Withlacoochee State Forest in Hernando County. Motorcycle Area set aside for riding trails and courses for off-road motorcycles and all-terrain vehicles (ATVs). Three alternative master plans developed for client selection with selected design further developed with roadway design and engineering report.

**d.**

(1) TITLE AND LOCATION *(City and State)*

**Florida Department of Environmental Protection, Terra Ceia Boat Ramp Master Plan, Terra Ceia Preserve State Park, Palmetto, Florida**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Planner:** MACTEC has been contracted to prepare three conceptual alternative plans for the Terra Ceia Boat Ramp Facility. The Conceptual Plans were reviewed by the project stakeholders and the selected design was developed into constructions plans and specifications. The construction plans included boat ramp and floating dock, canoe launch, separate boat trailer and passenger car parking areas, and public restrooms. Additionally MACTEC conducted Survey and Mapping Services, Geotechnical Evaluations, Civil – Site Engineering, Natural Resource Survey, and Permitting.

**e.**

(1) TITLE AND LOCATION *(City and State)*

**City of Winter Haven South Lake Conine Watershed Restoration and Stormwater Treatment Services, Winter Haven, Florida**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Planner:** Mr. Schenk served as Park Planner for the design and permitting services for development / restoration of watershed facilities on 34-acre, city-owned lakefront parcel. Restoration improvements to include a public park and stream channel for use by canoe and kayak for recreation. Design includes regional stormwater pond and treatment train, finishing with polishing wetland before discharge into lake. Design effort included wetlands delineation / assessments, park design, geotechnical investigations, boundary and topographic survey, watershed modeling, stormwater pollutant load modeling, stormwater treatment train design.

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| **Eric A. Blomberg, PG** | **Corporate Liaison** | **a. Total** 24 | **b. Current Firm** 23 |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
Master of Science, Hydrogeology, Georgia Institute of Technology, 1988 Bachelor of Science, Geological Engineering, Colorado School of Mines, 1985

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Professional Geologist, FL, # PG 1695
Professional Geologist, AL, # PG 1219
Professional Geologist, GA, #PG000846

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Mr. Blomberg is a principal hydrogeologist with two decades of experience. He has been part of the project management team for several multimillion dollar RI/FS projects which include contamination investigation, design, and construction. His areas of expertise include program, project and technical management, geology, hydrogeology, and geologic engineering. His work experience includes remedial investigations (RI) and feasibility studies (FS), Resource Conservation and Recovery Act (RCRA) facility investigations (RFI), site inspections (SI), contamination assessments, environmental site assessments, site assessments, field investigations, data evaluation, workplan and report writing and review, groundwater, surface water, sediment and soil sampling, aquifer characterization, soil gas and geophysical surveys, gas chromatography, and costing and implementation of field operations. Mr. Blomberg's field investigations have covered landfills, industrial sites, underground and aboveground petroleum storage tanks (USTs and ASTs), jet fuel pipelines, gasoline stations, Navy bases, Air Force bases, and National Priority List (NPL) Superfund sites.

### 19. RELEVANT PROJECTS

a.
(1) TITLE AND LOCATION *(City and State)*
**FDEP - Drycleaning Solvent and Hazardous Waste Site Cleanup Program, Various Locations, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Geologist / Hydrologist:** Conducted hazardous waste and solvent cleanup and remediation services at dry cleaning business sites. Services included environmental and contamination assessments (soil, soil gas and groundwater sampling and analysis); monitoring well installation; recommendation of remediation technology; remedial design, development and testing; system operation and maintenance; and project documentation. Responsible for providing project and technical leadership for several sites, performing assessments utilizing rotosonic drilling techniques to rapidly collect lithologic samples, install monitoring wells, and minimize the investigative derived waste. **Fees: $8,000,000**

b.
(1) TITLE AND LOCATION *(City and State)*
**Florida Department of Environmental Protection (FDEP), Petroleum Pre-Approval Program Environmental Services, Miscellaneous Locations, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Environmental services at over 400 petroleum sites statewide with a total value of over $80 million in contract fees, using innovative assessment and remediation techniques including direct push rigs for rapidly assessing the extent of soil and groundwater contamination, a fuel fluorescence detector for free product delineation, a cone penetrometer for rapidly identifying lithology and installing micro-wells, dual-phase extraction of soil gas and groundwater, low-flow biosparging with 800-foot horizontal wells, bioremediation of contaminated groundwater, natural attenuation of groundwater, using large-diameter augers to remove petroleum contaminated soil, and chemical injection. Responsible for managing the scope, schedule, and budget of numerous projects valued at over $10 million in fees; provided technical leadership for over 50 petroleum sites. **Fees: $26,017,930**

c.
(1) TITLE AND LOCATION *(City and State)*
**FDEP - Pre-Approval Program, Metro Shell Station Remediation System Design and Construction, Tallahassee,, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2006 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager.** Installation of soil and groundwater remediation system for petroleum contamination at site of service station in an urban setting. Soil vapor extraction system installed to treat vadose zone soil contamination; horizontal well biosparge system installed to treat groundwater contamination. Responsible for the management and technical direction of the design and installation of a $600,000 soil and groundwater remediation system. Included the installation of two horizontal biosparge wells which were 1,300-feet-long and 70-feet-deep, and a soil vapor extraction system. **Fees: $750,000**

d.
(1) TITLE AND LOCATION *(City and State)*
**FDEP - Suwannee County Public Works Department Site Contamination Removal, Live Oak, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2004 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Project Manager:** Source removal of free product and petroleum-contaminated soil using large-diameter augers to depth of 75 feet below land surface at site operated by local Public Works agency. Services included well sampling and abandonment, site restoration, monitoring, injection well installation and groundwater treatment. Removed and disposed of over 50,000 tons of soil and 60,000 equivalent gallons of free product. Responsible for the management and technical direction of a $5.2 million soil excavation using large-diameter augers to a depth of 75-feet-below land surface; conducted 578-feet-diameter auger borings to remove over 40,000 tons of petroleum contaminated soil. **Fees: $5,200,000**

e.
(1) TITLE AND LOCATION *(City and State)*
**FDEP - Pre-Approval Program, Walker's General Store Soil Vapor Extraction (SVE) Well Installation, Wacissa, FL**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: NA
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm
**Principal Hydrogeologist:** Installation of horizontal and vertical soil vapor extraction (SVE) wells, and installation of Internal Combustion Engine (ICE) and services for system startup, at environmentally impacted site of rural service station that previously experienced free product contamination from leaking underground storage tanks (USTs), with resulting plume extending across 11.4-acre area and more than 100 feet in depth, impacting the Floridan aquifer and several area domestic water wells. SVE well system and ICE to continue ongoing groundwater recovery and treatment effort. Responsible for overall technical direction for the cleanup of the site and client relations. **Fees: $94,410**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Jack Davis** | **Quality Assurance / Quality Control** | **32** | **23** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
Master of Public Health, Environmental & Industrial Health, University of Michigan, 1979
BS, Biology, Baldwin Wallace College, 1974

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
NA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Mr. Davis has experience in planning and managing environmental investigations for state, federal and private clients. This experience includes conducting Phase I and II environmental site assessments and environmental investigations for a variety of clients; evaluating hazardous waste generation, storage and disposal practices; conducting industrial hygiene studies; and developing health and safety plans for work on hazardous waste sites. Currently, Mr. Davis is the contract manager for MACTEC's Environmental Site Assessment contract and Conservation Easement Monitoring Contract with the Division of State Lands, Florida Department of Environmental (FDEP). In addition, Mr. Davis also manages numerous site assessment and site remediation projects under the FDEP petroleum contaminated site cleanup program.

## 19. RELEVANT PROJECTS

**a**

(1) TITLE AND LOCATION *(City and State)*
**Florida Department of Environmental Protection (FDEP), Bureau of Design and Construction, Various locations, FL**

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2013
CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm

**Project Manager:** Duties include establishing and managing project budgets, schedules and technical scopes for work conducted under Contracts DC482, DC755 and DC803; review of deliverables and interfacing with client contacts. Services include providing engineering design and assessment services for a variety of projects located in various State parks in Florida. Projects include geotechnical investigations at Delnor-Wiggins State Park; design of a boat ramp and associated parking at Terra Ceia and the design and development of an ADA compliant trail at Falling Waters State Park. **Fees: $3,000,000**

**b**

(1) TITLE AND LOCATION *(City and State)*
**FDEP Bureau of Land Acquisition, Environmental Site Assessments and Observations, Various Sites throughout Florida**

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2005
CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm

**Contract Manager –** Responsible as Contract Manager for meeting with the client, developing project scopes, managing personnel to conduct field site assessments, and preparing final deliverables; also responsible as Project Manager for overseeing activities for all project sites. Services include environmental site assessments, soil screening, groundwater sampling and analysis, monitoring well installations, asbestos and lead-based paint surveys, surface/subsurface geophysics, data collection / analysis and cost estimating. **Fees: $3,000,000**

**c**

(1) TITLE AND LOCATION *(City and State)*
**City of Tallahassee, FL**

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: On-Going
CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm

**Project Manager:** Responsible for interfacing with City staff; developing project budgets, schedules and scopes of services and managing project professionals during project execution and providing principal review of all deliverables. MACTEC is currently providing design, planning and engineering services to the City of Tallahassee for various trials and trailhead projects. The Tallahassee Junction Park Conceptual Plan project consisted of the preparation of a conceptual plan for the Tallahassee Junction Park and trailhead. Fern Trail Underpass project involved preparing a feasibility study for a trail underpass under FDOT Capital Circle Bridge on CSX railroad right of way. **Fees: $52,000**

**d**

(1) TITLE AND LOCATION *(City and State)*
**FDEP, Munson Nursery Source Removal, Munson, FL**

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2009
CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm

**Project Manager:** Under FDEP Petroleum Cleanup program, implemented source removal plan developed by MACTEC. Approximately 1250 tons of petroleum contaminated soil were excavated and disposed of from a Florida Division of Forestry nursery site. Due to abnormal rain event, approximately 30,000 gallons of rainwater that collected in the excavation required treatment through carbon units before discharging from the excavation. The limits of the excavation were determined by screening soil using organic vapor analyzers. Confirmation soil samples were collected for laboratory analysis. Once the excavation was completed the site was restored to original condition which included replacing sections of main driveway into the nursery facility. 1250 tons of petroleum contaminated soil removed. Excavation was approximately 12 feet deep. Responsible for managing client and property owner (Florida Division of Forestry) during source removal activities. Managed staff as well as subcontractors involved in the project. Provided technical guidance to staff during the project execution. **Fees: $145,000**

**e**

(1) TITLE AND LOCATION *(City and State)*
**FDEP, Petroleum Pre-Approval Program Environmental Services, Miscellaneous Locations, FL**

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2008
CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm

**Project Manager** - Environmental services at over 400 petroleum sites statewide with a total value of over $80 million in contract fees, using innovative assessment and remediation techniques including direct push rigs for rapidly assessing the extent of soil and groundwater contamination, a fuel fluorescence detector for free product delineation, a cone penetrometer for rapidly identifying lithology and installing micro-wells, dual-phase extraction of soil gas and groundwater, low-flow biosparging with 800-foot horizontal wells, bioremediation of contaminated groundwater, natural attenuation of groundwater, using large-diameter augers to remove petroleum contaminated soil, and chemical injection. Duties include establishing and managing program budgets, schedules and technical scopes of work; review of deliverables and interfacing with client contacts. MACTEC has conducted over $20 million dollars of assessment and remediation work under this program. **Fees: $50,000,000**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Rene J. Schneider, PE** | **Civil Site/Municipal Engineering** | **30** | **7** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Coursework, Master of Business Administration-Real Estate, University of North Carolina, 0 Advanced Diploma, Accounting, Central Piedmont Community College, 2002 Coursework, Master of Business Administration-Technology Management, New Jersey Institute of Technology, 2000 Master of Science, Management, New Jersey Institute of Technology, 1999 Advanced Diploma, Human Resource Management, New Jersey Institute of Technology, 1998 Bachelor of Science in Engineering, Civil and Environmental Engineering, New Jersey Institute of Technology, 1981

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Professional Engineer, FL, #61483, 2004
Professional Engineer, PA, #36820, 1987

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

With over 25 years of due diligence, civil-site and municipal engineering, surveying and construction oversight to his credit, Mr. Schneider possesses considerable experience with highly visible public and private sector projects. This experience includes a diverse array of site developments, transportation, flood control, and other heavy municipal infrastructure.

## 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*

**55 West on the Esplanade, Church Street, Orlando, FL Mixed-Use Development Site Survey, Construction Materials Testing, Threshold Inspection, Pre-Demolition Asbestos Survey, Orlando, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2005 | $140M est const cost |

N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Responsible for overseeing survey, civil site development engineering and environmental permitting; performed engineering design and client liaison services with significant challenge in creating a design that melds properties on opposite sides of the street into one cohesive public space while maintaining the integrity and functionality of a city street; involved close coordination and redevelopment of design criteria with the City Engineer in keeping the project compliant with the spirit of AASHTO criteria. **Scope:** Preliminary site survey, civil / site design, construction materials testing and threshold inspection for construction of 32-story, high-rise upscale condominium complex in downtown Orlando. **Fees: $225,520**

b.

(1) TITLE AND LOCATION *(City and State)*

**Baldwin Harbour Condominium Development Surveys, Civil Engineering Services, Orlando, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2005 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Responsible for managing and directing all survey, civil site activities and serving as client and consultant liaison. **Scope:** Boundary, building control and topographical surveys, construction documents and civil engineering services for development of two mid-rise, mixed-use condominium buildings (7-story / 460-unit, 8-story / 500-unit) with parking structure. **Fees: $149,000**

c.

(1) TITLE AND LOCATION *(City and State)*

**BB&T / Trammell Crow Company Florida Sites Phase I Environmental Site Assessments, Due Diligence Services, Various Locations, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2007 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Engineer of Record:** Responsible for overseeing civil-site development and permitting processes; coordinated efforts of all disciplines involved. **Scope:** Under direction of Trammel Crow / CB Richard Ellis, performed due diligence services, Phase I environmental site assessments, geotechnical evaluations, property surveys and civil site development, construction document and regulatory permitting services for more than a dozen sites throughout the State of Florida for BB&T prototypical bank branches with drive-thru aisles. **Fees: $102,470**

d.

(1) TITLE AND LOCATION *(City and State)*

**CB Richard Ellis Fifth Third Bank DeNova Retail Bank Program Rollout Support, Jacksonville and Other Cities, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2008 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager: Scope:** Engineering and environmental consulting services for retail banking facilities throughout State of Florida under multi-year Master Services Agreement. Services in support of client's DeNova program rollout for retail banking, and included due diligence; design and construction management workshops for client Project Managers; asbestos abatement; geotechnical investigation and engineering; groundwater assessments; permitting; Phase I and II environmental site assessments; soil screening; site investigation reports; traffic analyses; and surveying. Initial services to provide due diligence at bank facilities in Jacksonville and Middleburg. **Fees: $188,090**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Charlene A Stroehlen, PE** | **Drainage/Stormwater Management** | **31** | **5** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Master of Business Administration, Business Administration, Florida Southern College, Lakeland, Florida, 1986 Bachelor of Science in Mining Engineering, Mining Engineering, University of Pittsburgh, 1980

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Professional Engineer - Civil, FL, #58774, 2002

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Ms. Stroehlen is a Senior Principal Engineer with professional experience in stormwater treatment design, pumping system design, wetland restoration design, ERP, Hillsborough County, SWFWMD, FDEP, DOT and ACOE permitting, surface water modeling, wetland water budget modeling, construction bid package plans and specification preparation and construction management. She has managed many stormwater and wetland projects from the design and permitting stage through construction and final certification. Ms. Stroehlen has designed, modeled, and prepared permit applications and bid specifications as well as supervised construction for many pumping systems and thousands of acres of wetlands.

## 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*

**City of Naples Riverside Filter Marsh, Naples, FL**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2009 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Responsible for oversite of design, permitting and construction of a stormwater treatment filter marsh for the City. **Scope:** Provide Engineering services to prepare designs, permits and provide construction services for a filter marsh to treat storm water discharge from the Goodlett Road Pump StationThe City of Naples has retained MACTEC to design a stormwater treatment marsh for the Goodlette Road Pump Station stormwater system outfall. This will involve geotechnical exploration and design of a berm and retaining wall, survey, wetland delineation and UMAM characterization, hydraulic modeling (both water quantity and quality) and design, preparation of construction drawings, permitting, and construction oversight. A major goal of this project is the reduction of total nitrogen loading on the Gordon River, which is listed as an impaired waterbody for total nitrogen by FDEP. This will assist the City in complying with new Total Maximum Daily Load (TMDL) requirements and also improve water quality throughout the Gordon River and Naples Bay.Currently, the City of Naples uses a large pump station (the Goodlette Road Pump Station) to convey stormwater runoff from a 226 acre urbanized area directly into the Gordon River. **Fees: $80,000**

b.

(1) TITLE AND LOCATION *(City and State)*

**City of Tampa Spring Lake Outfall Basin Master Plan Stormwater Modeling, Tampa, FL**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2008 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Project Manager: Principal review XP SWMM 2d stormwater model and three proposed alternatives to reduce flooding and add water quality aspect to the system. **Scope:** Preparation of two-dimensional stormwater model as part of master plan for 420-acre Spring Lake Outfall Basin. **Fees: $74,500**

c.

(1) TITLE AND LOCATION *(City and State)*

**City of Winter Haven South Lake Conine Watershed Restoration and Stormwater Treatment Services, Winter Park, FL**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES: 2009 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** As Project Manager and Engineer-of-Record oversaw all services including bidding and construction services and post-construction water quality monitoring. **Scope:** Design and permitting services for development / restoration of watershed facilities on 34-acre, city-owned lakefront parcel. Lake impaired with nutrient TMDL. Design includes regional stormwater pond and treatment train, finishing with polishing wetland before discharge into lake; design intended to improve lake water quality via nutrient load reductions. Design effort included wetlands delineation / assessments, geotechnical investigations, boundary and topographic survey, watershed modeling, stormwater pollutant load modeling, stormwater treatment train design, and park design. Services also included bidding and construction services and post-construction water quality monitoring. **Fees: $218,160**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Edward G. Czyscon, ASLA** | **Parks and Recreation Planning and Design** | **35** | **1** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Bachelor of Landscape Architecture, Syracuse University, 1975 Bachelor of Science, Environmental Studies, Syracuse University, 1974 Associate of Applied Science, Forestry, Paul Smith's College, 1971

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Registered Landscape Architect, NC, #1140, 1999 Registered Landscape Architect, VA, #933, 1999 Registered Landscape Architect, SC, #538, 1990 Registered Landscape Architect, GA, #1195, 2000 Registered Landscape Architect, FL, #565, 1978

Erosion Prevention and Sediment Control Inspector, #17759

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

A Senior Principal Landscape Architect, Mr. Czyscon has over three decades of experience specializing in design and management of professional engineering offices, projects and project design teams consisting of landscape architects, engineers, planners, architects, and biologists. His project experience includes Master Planning/Landscape Architectural projects for streetscape and urban design, large-scale park/recreational developments, municipal courthouses, office and industrial developments, wetland enhancement and mitigation design, and residential developments. Mr. Czyscon has also managed multi-disciplined design offices and led business development efforts.

## 19. RELEVANT PROJECTS

**a.**

(1) TITLE AND LOCATION *(City and State)*

**Cherokee County, Georgia, Woodstock Trails Design, Woodstock, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2011 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal Landscape Architect:** Responsible for preparing proposal, overseeing design, and providing project quality control. **Scope:** Planning and design for 10 trail projects and trailheads constituting 8 miles: Trestle Rock Trail Extension, Bridget Hammond Memorial Trail, Rubes Creek Trail Extension, Springfield Park Trailhead, Creekstone Trailhead, Noonday Creek Trail, Dupree Road Trailhead, Downtown Spur Trail, Towne Lake Pass Trail, and Towne Lake Hills South Trailhead. Included construction standard, code, and guideline review; site inventory and analysis; surveying; environmental studies and documentation; drainage and erosion control considerations; trail furniture (e.g., litter receptacles and benches); utility coordination; right-of-way (ROW) plans; cost estimating; development of a project manual, including technical specifications; bid and letting assistance; and construction observation. **Fees: $166,140**

**b.**

(1) TITLE AND LOCATION *(City and State)*

**City of Kennesaw Community Trail Engineering Design Services, Kennesaw, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2006 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal Landscape Architect: Scope:** Engineering design services in support of development of 2,600-foot community trail integrated into existing neighborhood park, including development of construction documents and construction administration. **Fees: $24,000**

**c.**

(1) TITLE AND LOCATION *(City and State)*

**City of Kennesaw Sardis Street Extension and Improvements Planning and Conceptual Design, Kennesaw, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2009 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal Landscape Architect: Scope:** Transportation planning and engineering for conceptual layout of street extension and improvements, including roadway analysis, traffic study, accident summary and preliminary design concept. **Fees: $16,500**

**d.**

(1) TITLE AND LOCATION *(City and State)*

**City of Tifton Phase II Downtown Streetscape Enhancements, Tifton, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2011 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal Landscape Architect: Scope:** Design of Streetscape Improvements project-Survey and environmental documentation, design and engineering and additional cost administration. **Fees: $158,000**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Charles A. Phillips, ASLA, LEED AP** | **Parks and Recreation Planning and Design** | **31** | **4** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Bachelor of Landscape Architecture, Recreation Planning, University of Arkansas, 1981 Associate of Art, Art, Pensacola Junior College, 1977

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Registered Landscape Architect, FL, #956, 1983 Registered Landscape Architect, SC, #1018, 2007 Registered Landscape Architect, AR, #332, 2008 Registered Landscape Architect, PA, #2794, 2008 Registered Landscape Architect, NC, #1482, 2007 Registered Landscape Architect, VA, #501, 1992 Registered Landscape Architect, GA, 1987 GA SWCC Certified, #7791LEED Accredited, #10223253

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Mr. Phillips has over two decades of landscape architectural experience. He has been responsible for the design of numerous public and private sector projects. Mr. Phillips has used his expertise to provide recreational opportunities to meet a wide variety of needs in parks ranging in size from passive parks to regional sports facilities. Additional open space projects that he has been involved in include the preparation of master plans and construction documents for veteran and private sector cemeteries. In the residential market, Mr. Phillips has prepared master plans and construction documents for single and multi-family projects, including mixed use developments. Throughout his career, he has actively been involved in the interaction with various government personnel and the public.

## 19. RELEVANT PROJECTS

a.
(1) TITLE AND LOCATION *(City and State)*
**Cherokee County, Georgia, Woodstock Trails Design, Woodstock, GA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2011 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm
**Project Manager:** Responsible for overseeing project budget. **Scope:** Planning and design for 10 trail projects and trailheads constituting 8 miles: Trestle Rock Trail Extension, Bridget Hammond Memorial Trail, Rubes Creek Trail Extension, Springfield Park Trailhead, Creekstone Trailhead, Noonday Creek Trail, Dupree Road Trailhead, Downtown Spur Trail, Towne Lake Pass Trail, and Towne Lake Hills South Trailhead. Included construction standard, code, and guideline review; site inventory and analysis; surveying; environmental studies and documentation; drainage and erosion control considerations; trail furniture (e.g., litter receptacles and benches); utility coordination; right-of-way (ROW) plans; cost estimating; development of a project manual, including technical specifications; bid and letting assistance; and construction observation. **Fees: $166,140**

b.
(1) TITLE AND LOCATION *(City and State)*
**City of Albany - Dougherty County Radium Springs Botanical Gardens Park Master Planning and Design Services, Albany, GA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2010 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm
**Project Manager:** Responsible for the creation of the botanical garden; led public meetings and oversaw design. **Scope:** Phase I master planning, landscape / hardscape design services, permitting and construction administration for development of 5-acre municipal park at this historic facility and site of largest natural spring in the state. Historic structure destroyed during heavy flooding in 1990s. New botanical garden designed within the ruins of the former resort. New facilities include flood-resistant restroom facilities, pedestrian trails / walkways, and parking area. **Fees: $72,500**

c.
(1) TITLE AND LOCATION *(City and State)*
**City of Albany Engineering Department Gordon Sports Complex Renovation Construction Documents, Albany, GA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2008 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm
**Project Manager:** Responsible for overseeing project activities, managing resources, and addressing project issues as needed. **Scope:** Construction documents for master planned renovation of, and improvements to, sports complex with five softball and general sports fields (300 feet each in diameter), picnic facilities and parking area. Construction services included site grading, stormwater drainage, asphalt paving, curbs and gutters, sanitary sewers, walkways, field lighting and fencing, landscaping and facility renovation. **Fees: $196,000**

d.
(1) TITLE AND LOCATION *(City and State)*
**City of Doraville English Oak Park Construction Management Services, Doraville, GA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2009 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE
☑ Check if project performed with current firm
**Principal:** Responsible for providing quality assurance / quality control (QA/QC) reviews and advising on construction-related issues. **Scope:** Construction management services for development of 1.71-acre municipal park featuring tennis and basketball courts, picnic tables, playground and greenspace, including contractor oversight to ensure quality and compliance with approved construction documents and reports issued to client documenting status of construction. **Fees: $15,000**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Ronald R. Huffman, AICP, ASLA** | **Parks and Recreation Planning and Design** | **27** | **7** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Master of Arts, History / Historic Preservation, Auburn University-College of Liberal Arts, 1984 Master of Community Planning, Community Planning, Auburn University School of Architecture and Fine Arts, 1984 Bachelor of Landscape Architecture, Landscape Architecture, Auburn University School of Architecture and Fine Arts, 1983

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Registered Landscape Architect, GA, #805, 1986 Certified Planner (AICP), US, #7023, 1988

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Responsible for all facets of planning, landscape architecture, and urban design for public and private clients. Key areas of specialty are parks and recreation design and master planning, trail design, city/county comprehensive planning, citizen participation, redevelopment land planning, streetscape design, military planning, historic preservation and cemetery design and master planning. Clients have included cities and counties across the Southeast and Midwest as well as the Department of Homeland Security, the Veterans Administration, the Air Force Center for Environmental Excellence (AFCEE), the Bureau of Land Management (BLM), the National Park Service, the Georgia and Missouri Departments of Natural Resources, the Georgia Department of Transportation, and Georgia Power, Ameren (Mo.) and Duke Power (NC and SC). Since joining MACTEC, Mr. Huffman has been responsible for developing and growing a Planning and Landscape Architecture team. To date, the Planning and Landscape Architecture Team has completed more than 200 projects in 14 states and 2 foreign countries. The team has received 10 professional awards and has been featured on 2 television specials. He is also acting as the National Business Line leader for development and pursuit of trail planning and design projects.

## 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*

**Cobb County Parks, Recreation, Cultural Affairs Clarkdale Park Properties, Marietta, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2007 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal:** Responsible for principal review of park master plan, rehabilitation concepts and final deliverables. **Scope:** Master plan to guide the improvement of existing parks facilities and the development of new facilities at "Old Clarkdale Park", an historic park within the National Historic Register Clarkdale Mill Community District. At the time of the study the park consisted of existing, overgrown and un-maintained baseball fields and an historic community center building. Old Clarkdale Park is part of the original planned mill community designed to serve the employees of the nearby Clarkdale Mills. "New Clarkdale Park" is to be expanded into an adjacent parcel of land with additional, active recreation amenities, anticipated to include tennis courts, trails, pavilions and parking. The historic community center will be preserved, restored and maintained as a community gathering center and rental facility to the park. A Property/Building Conditions Assessment was implemented. This included a historic resource assessment and historic structures report on the eventual scope of restoration for the Community Center Building.Two Park Master Plans to evaluate the capability of existing facilities to provide the desired new or additional amenities for the two sites (both the "old" portions of the historic park and the adjacent New Clarkdale Park). 4 acres & (appx. 15,000 SF) community building on one level with kitchen, auditorium/raised stage & offices, and locker/shower/utility under the stage. **Fees: $22,500**

b.

(1) TITLE AND LOCATION *(City and State)*

**Cobb County Parks, Recreation, Cultural Affairs Fellton Property, Marietta, GA**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2007 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Principal:** Responsible for running county & client meetings and for principal review of park master plan, rehabilitation concepts and final deliverable. **Scope:** Condition assessment of an existing mid-century, custom built ranch-style family home located on the Fellton Property donated to Cobb County Parks and Recreation Department. A master plan was desired to guide improvement of 14 acres of property for use as a passive park with a community art center on the property. Develop Master Plan with public input.Master Plan to evaluate the capability of existing facilities to provide amenities for the site through a Property and Building Condition Assessment in general accordance with applicable portions of ASTM E2018-01 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Master Plan to set the course for future recreation amenitites. Perform an evaluation of the subject property for the purpose of assessing the general architectural quality of the main structure's regard to historic significance (if any) and its' potential for adaptive use. **Fees: $21,000**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Ann B. Shortelle, PhD** | **Mitigation Design and Permit** | **27** | **23** |

15. FIRM NAME AND LOCATION *(City and State)*
**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION *(Degree and Specialization)*
PhD, Limnology, University of Notre Dame, 1985; BS, Biology, Mercer University, 1975

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
NA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
**Career Summary:** Dr. Shortelle is a Chief Scientist, Senior Principal and Senior Project Manager with extensive professional experience over two decades in limnology, lake and reservoir management, ecological risk assessment and toxicology, and bioaccumulation and ecological modeling, and environmental assessments. She has managed numerous exposure and risk assessments of contaminated sites and spills, as well as aquatic, estuarine, and wetland assessments related to eutrophication, acid deposition, toxic effluents, biomonitoring, siting and licensing, mitigation planning, and natural resource damage assessment. She has managed and conducted field and laboratory bioaccumulation studies and bioassays, and has developed and verified bioaccumulation models for contaminants in riverine systems. The project experience also included biostatistical analyses of multimedia systems with aquatic and terrestrial biota. NEPA related work has included Environmental Impact Statements (EIS), Environmental Reviews (ERs), Environmental Assessments (EAs and EIAs), and Biological Assessments (BA) at sites worldwide including the Caribbean.

### 19. RELEVANT PROJECTS

**a**

(1) TITLE AND LOCATION *(City and State)*
**US Army Corps of Engineers (USACE)- Huntsville District, Hazardous Waste Remedial Design and Related Environmental Services, Various Facility Location**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Delivery Order Manager:** Hazardous and toxic waste investigations, chemical warfare materials studies, remedial designs, construction phase services, GIS services and related environmental services at key installations throughout US and Caribbean impacted with use and presence of military munitions. Included services at all five major Defense Distribution / Supply Centers and all 11 active Defense National Stockpile Sites. Responsible for scope, schedule, and budget on multiple task orders. **Fees: $3,757,300**

**b**

(1) TITLE AND LOCATION *(City and State)*
**US Army Anniston Army Depot (ANAD) and Milan Army Ammunition Plant Remediation, Anniston, AL and Milan, TN**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Risk Assessor:** MACTEC's scope for Milan Army Ammunition Plan and ANAD included environmental assessment, remedial system design and implementation, and regulatory negotiation for VOC-contaminated soil and groundwater using in situ oxidation, specifically injection of Fenton's reagent, under an IDIQ contract for US Army Environmental Center administered by USACE Baltimore District. Savings to the army exceeded $27 million through use of this technology at ANAD and, when implemented at Milan Army Ammunition Plant, the savings are estimated to total $33 million over the Army's approach using pump-and-treat technology at both sites. Responsible for conducting terrestrial and aquatic Tier 2 assessment concerning munitions and metals in streams and landfills. Issues included munitions and munitions residues, other organics, and metals in terrestrial, aquatic, and semi-aquatic habitats. Performed a food web modeling analysis using site-specific data and results analyzed for both human and non-human receptors. Conducted toxicity testing to evaluate the need for sediment remediation in support of the Tier 2 ecological risk assessment. **Fees: $10,898,510**

**c**

(1) TITLE AND LOCATION *(City and State)*
**Florida Department of Environmental Protection (IFAS - SOLP) 28 Agricultural Research Stations Contamination and Risk Assessments, Various Locations (28 in all), FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2003 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Wetlands Specialist:** Contamination Site Assessments, Risk Assessments and Remediation of 28 Research Agricultural and Educational properties operated by the University of Florida Institute of Food and Agricultural Sciences. Work initiated under FDEP Consent Order with the Florida Department of Environmental Protection to address historical hazardous wastes disposal practices at more than 130 sites. Responsible for the evaluation of fate of chemicals of concern to riparian wetland habitat and adjacent floodplain, lakes, and other water bodies for effects, and as sites for potential storm water retention and wetland restoration. **Fees: $1,250,000**

**d**

(1) TITLE AND LOCATION *(City and State)*
**Carolina Power & Light Sanford Remediation Group Ecological Risk Assessment, Sanford, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2004 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Principal Scientist:** Comprehensive Ecological Risk Assessment for approximately one mile of streambed sediments contaminated by former MGP site (OU3). Collected 16 sediment samples and performed physical characterization, chemical analysis (subcontracted), and toxicity testing. Results interpreted using statistical evaluation procedures in accordance with CERCLA risk assessment guidance. Responsible for performing ecological risk assessment and technical review and interfacing with regulatory agencies. **Fees: $154,000**

**e**

(1) TITLE AND LOCATION *(City and State)*
**St. Johns River Water Management District Lake Apopka NSRA & Districtwide Environmental Assessments, Palatka and Other Areas, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2005 — CONSTRUCTION *(If applicable)*: NA

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☑ Check if project performed with current firm

**Senior Scientist:** Phase I-IV Environmental site assessments, sampling and analysis / contamination assessments, feasibility studies; preliminary design services and remedial action plans for approximately 100 parcels in several counties in north and northeast Florida. Assessed more than 60,000 acres, with more than 23 assessments for large tracts exceeding 300 acres (average parcel size 1,300 acres). One of most significant projects for Lake Apopka North Shore Restoration Area (NRSA). Responsible for serving as Quality Control / Wetlands Ecologist for Lake Apopka North Shore Restoration Area (NSRA) Feasibility Study. **Fees: $525,560**

## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

*(Complete one Section E for each key person.)*

| 12. NAME | 13. ROLE ON THIS CONTRACT | 14. YEARS EXPERIENCE | |
|---|---|---|---|
| | | a. Total | b. Current Firm |
| **Todd A. Boehmer, PE** | **Construction Manager** | **26** | **20** |

15. FIRM NAME AND LOCATION (City and State)

**MACTEC Engineering and Consulting, Inc.**

MACTEC

16. EDUCATION (Degree and Specialization)

Bachelor of Science, Geological Engineering, University of Arizona, 1985

17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)

Professional Engineer, FL, #PE-0042478, 1990
FL Certified, #NV9999FL DOT Certified, #NV9999FL DOT Certified, #NV9999FL DOT Certified Maintenance of Traffic, #NV9999FL DOT CTQP Certified, #B56080163IMSA Work Zone Safety Specialist, #NV9999Radiation Safety and Use of Nuclear Gauges, #34288

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Currently a Senior Project Manager, Mr. Boehmer has been a valued asset at MACTEC since 1991. He has focused most of his talents in the consulting business over the course of two decades by performing a wide range of construction and geotechnical engineering projects. The construction portion has included monitoring and quality control testing for numerous roadway, structure, and airport projects. This line of work has also utilized his office engineer and project engineer expertise for numerous state department of transportation construction engineering inspection and testing services, including, pile installing, pile load testing, post tensioning, and steel inspection on several high rise building projects and airport pavement evaluation and testing. His responsibilities included conducting regular project coordination meeting with the contractor, subcontractors and utility companies, contract administration, and contractor negotiations. Additionally, internal responsibilities include staff training, supervision and quality control. He reviews project construction and documentation for compliance with state department of transportation standards including policies, procedures, and practices. Mr. Boehmer has completed inspection and testing assignments on many other infrastructures. The geotechnical work he has performed has included borrow pit evaluations, foundation design and analyses, roadway and retention pond under drain analyses, and pavement design.

Mr. Boehmer also has experience and knowledge on the following processes: millings, resurfacing, widening signalization, highway lighting, high mast lighting, mechanically stabilize earth walls, drainage, signalization, lighting, signing, and striping.

## 19. RELEVANT PROJECTS

**a.**

(1) TITLE AND LOCATION *(City and State)*

**Florida Department of Transportation (District 1) Construction Engineering and Inspection (CEI) for Cypress Gardens Boulevard (SR 540), Winter Haven, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2002 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Responsible for managing an $8.4 million, 750-day contract to reconstruct from 2 lanes to 4-lane-divided (500' concrete bridge, 550' permanent steel sheet pile wall filling a portion of a lake, 4 Mechanically Stabilized Earth (MSE) walls, extensive storm drainage, signals, lighting, signing, striping, Water & Sewer JPA). ***Completed 14% early with only 3.5% cost overrun*** . **Scope:** Provided consulting engineering, construction management of subcontractors, and construction inspection of soils, concrete, structural concrete piles and asphalt for expansion of a two-lane road to four lanes for a distance of 1.5 miles adjacent to two environmentally sensitive lakes and bridging a third. Completed 14 % early with only 3.5% cost overrun. Received the 2002 Florida Department of Transportation / Florida Transportation Builders' Association Best in Urban Construction Award. **Fees: $1,560,250**

**b.**

(1) TITLE AND LOCATION *(City and State)*

**Florida Department of Transportation (District 1) Rural Residency Construction Engineering Inspection (CEI) Support, Lake Placid, Other Towns, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2007 | Contract value N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Responsible for managing technical staff of 20+ performing all functions of a resident construction office including design phase reviews, utility reviews, construction engineering, inspection, scheduling, payments and contract management. **Scope:** Construction engineering inspection including materials sampling, testing and inspection, and administrative support as part of Consultant Rural Residency program with Florida DOT. **Fees: $13,700,000**

**c.**

(1) TITLE AND LOCATION *(City and State)*

**Florida Department of Transportation (District 1) S.R. 72 Construction Engineering Inspection and Materials Testing, Sarasota, FL**

(2) YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 1997 | N/A |

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☑ Check if project performed with current firm

**Project Manager:** Responsible for managing project to reconstruct a two-lane road to a 6-lane divided highway. Services for the $7 million, 640-day project involved storm drainage, wetland mitigation, signalization, lighting, signing and striping and reconstruction of a railroad crossing. **Scope:** Construction engineering inspection (CEI) and materials testing services for reconstruction of four-mile-long major highway including pond mitigation, signals, highway lighting and railroad crossing. **Fees: $995,550**

# B. Experience with Projects of a Similar Size

## *B1. Project Experience-References*

MACTEC is an experienced provider of recreational and park facility designs for projects of all sizes. Our design team has adopted a philosophy to design parks that will serve communities for years to come, to design parks that will remain part of generations of family memories and to design parks that play a vital role in maintaining our commitment to support sustainable development. In pursuit of that philosophy, MACTEC design professionals share the core values and passion and dedication that have become our design signature for professional service.

MACTEC's recreational design staff is thoroughly experienced in all aspects of designing recreation facilities including developing site utilities that match the needs and available resources of each park location. Our staff also provides expertise in meeting all regulatory requirements including ADA accessibility requirements. MACTEC's recreational design staff has been recognized with more than 25 professional planning and design awards. They have worked together on many projects and have the range of experience in park planning, design and cost estimating to thoroughly understand the technical, regulatory and political complexities of park development projects. Our experience is highlighted in the project descriptions presented at the end of this section.

## *B2. Additional Project Experience*

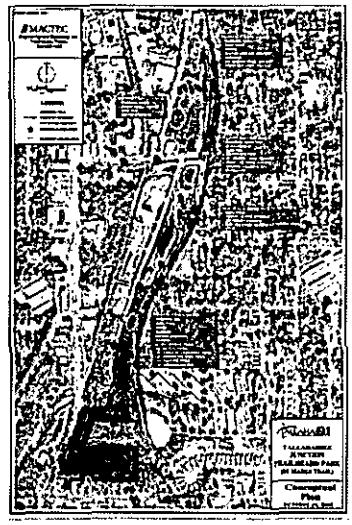
Our park planners and landscape architects are very experienced at designing and developing parks from ¼-acre mini-parks to thousand plus acre regional and state parks This experience includes hundreds of recreational facilities, roads, parking lots, trails of all types, sports facilities, greenways, and other park amenities. We have the experience to design multi-use areas for active and /or passive use depending on the users needs and wants. In addition, MACTEC has the unique experience to not only design a functional and beautiful park but also one that can be maintained easily with the lowest expenditure of time and operating budget. This is possible because MACTEC staff has also been responsible for programming parks, staffing parks, maintaining parks and budgeting for on-going daily operations. We understand that easy and inexpensive maintenance begins with good design and the selection of construction materials that will hold up to the challenges of heavy use by park patrons.

From engineering, park design, permitting, wetland delineations, geotechnical surveys to construction management and materials testing MACTEC has the technical horsepower and experience to successfully complete the project on time and on budget. Our experience includes:

***National Park Service*** – Since 1993, MACTEC has performed over 110 delivery orders for the National Park Service. MACTEC's most notable experience with the National Park Service was the relocation of the Cape Hatteras National Seashore Historic Light Station. Under a design / build contract awarded by the National Park Service, MACTEC was the lead consulting engineering firm providing services for the relocation of the Light Station complex at Cape Hatteras National Seashore, an undertaking of historical significance. MACTEC provided geotechnical, structural, electrical, civil, materials and instrumentation engineering, as well as hazardous materials and environmental services, project management assistance and coordination.

***City of Tallahassee*** – MACTEC has recently provided design, planning and engineering services to the City of Tallahassee for various trails and trailhead projects. The Tallahassee Junction Park Conceptual Plan project consisted of the preparation of a conceptual plan for the Tallahassee Junction Park and trailhead. The 24 acre linear park is located at the junction of the Tallahassee to St. Marks Historic Railway Trail and the proposed

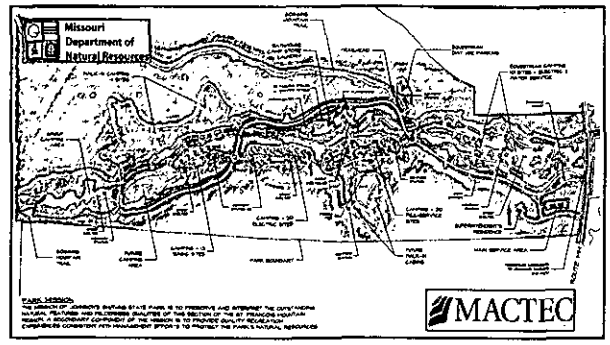
G F & A Trail. The conceptual plan included outdoor recreation uses, trail layout and connections and recreation amenities, as well as general locations for trails, access, parking and wildlife viewing areas around the existing stormwater ponds. Following acceptance of the conceptual plan, a master plan was developed for the northern portion (Phase 1) of the project. The master plan shows specific locations and sizes for all proposed park amenities in accordance with the conceptual plan. The park amenities were planned with a railroad theme in keeping with its trailhead functions for the St. Marks Trail and future connections to the G. F. & A. Trail. Phase 1 includes four main areas of focus: a neighborhood playground, a basketball court, an exercise trail, and a trailhead for the St. Marks Trail. MACTEC is also finalizing a Greenway Connection Study for the City of Tallahassee. The study prioritized the top five trail connectors within the Tallahassee-Leon County Trail system.



***Florida Department of Environmental Protection*** - MACTEC is currently providing design, planning and engineering services to the FDEP for several park/recreational facility projects. MACTEC is currently developing reclamation plans and a master park plan for the Ichetucknee Trace Mine Park project in Columbia County. In addition MACTEC has developed conceptual alternatiave plans for the Terra Ceia Boat Ramp facility located in the Terra Ceia Preserve State Park and are currently developing construction plans for a boat ramp and floating dock, canoe launch, separate boat trailer and passenger car parking areas and public restrooms. Finally, MACTEC has just completed conceptual plans and construction plans for re-development of a trail and facilities to be ADA compliant at Falling Waters State Park.

***Florida Department of Agriculture and Consumer Services, Division of Forestry*** – The Croom Motorcycle Area, established in 1973, is located within the Withlacoochee State Forest northwest of the intersection of Interstate Highway 75 and State Road 50 in Hernando County, Florida. The CMA includes 2600 acres of hardwood hammocks, scrubs, and pits from historic mining operations set aside as trails and riding areas for off-highway motorcycles and all terrain vehicles (ATVs). The Withlacoochee Forestry Center (WFC) initiated the project to develop a new 50-unit RV Campground in the southern part of the CMA. Following on-site meetings with the client and data collection, MACTEC prepared three alternative master plans for the campground incorporating options for layout, utilities, and associated facilities. The preferred alternative was selected in a second client meeting and the final master plan was developed. An engineering report was also prepared to present opportunities and limitations for utility services and roadway design, including estimated costs for each alternative. The master plan incorporated specialized features needed to serve the all-terrain vehicle and off-road motorcycle enthusiasts that use the CMA, such as over-sized camp spaces, vehicle-pedestrian conflict control, vehicle wash-racks, and trail access points.

***Acworth Parks System, Acworth Georgia*** – MACTEC staff provided design, planning and engineering of the entire park system for the City of Acworth. The park system consists of 10 parks totaling more than 600 acres of park land. The majority of this land is adjacent to Corps of Engineers' property surrounding Lake Acworth. Within the last five years MACTEC's staff have planned and engineered more than $6 million in improvements. Services included master planning, cost estimating and all facets of civil engineering including storm water drainage design, roadway design, sanitary sewer design, landscape design, construction inspection, and permitting. Recreation facilities designed and engineered for the City of



Acworth included boardwalks, trails, parking areas, sidewalks, playgrounds, fishing lake and dam, lighting, irrigation, picnic shelters, sports fields, and landscape planting.

***Goggins Mountain Campground, Johnson' Shut-ins State Park, Missouri Dept. of Natural Resources, Reynolds County, Missouri*** – One of the most popular parks in the Missouri State Park system, the 8,500 acre Johnson's Shut-ins State Park, is one of the most biologically diverse and geologically unique of all the Missouri State Parks. Camping areas within the park were almost completely destroyed by flooding associated with the break of an upstream reservoir. MACTEC staff, in coordination with the Missouri DNR, performed site analysis, reconnaissance, identified development constraints, conducted public input meetings, and developed a future needs analysis. MACTEC staff utilized this process to identify a 200 acre valley within the park as a replacement location for the park's popular camping areas. Adjacent to the Goggins Mountain Wild Area, this enclosed, peaceful valley includes abundant land outside of designated Wild Areas suitable for campground development, dramatic views of the St. Francois Mountain region and access to the Ozark Trail which provides connectivity to the Black River Day Use/River Recreation Area.

MACTEC staff designed a Conceptual Master Plan which proposed a spine road concept to provide vehicular access to all major amenities within the Goggins Mountain Campground: Equestrian Campground, Full-service Campground, Equestrian Day-Use Parking, Bathhouse/ Camp Store/Laundry Facility, Electric Campground, Basic Campground, Group Camping Area, and Day-Use Trail access. Additionally, the Conceptual Master Plan identified a network of trail loops that link campground and day-use areas to the Goggins Mountain Trail as well as provide access to support facilities such as comfort stations, restroom facilities, group shelters, picnic shelters, playgrounds, an outdoor classroom, and shuttle stops. MACTEC completed the award winning master plan in 2006. MACTEC then provided complete engineering and landscape architectural services for construction beginning in June 2007. The park was reopened in 2008.

***Georgia Veterans State Park*** – A 50 campsite campground was developed on Lake Blackshear in South Georgia. The campground is nestled under the pines overlooking the lake. All sites were developed for RV camping. The facilities also included a bath house, design of supporting utility systems, signage and park furnishings.

***City of Orlando Shingle Creek Trail Design and Planning Services, Orlando, Florida*** – MACTEC is assisting the City in the development of the 14-foot wide asphalt path, providing site planning, design, project management, construction inspection, right-of-way coordination and permitting services. The project is divided into two phases; the 3.25-mile Phase I section will run from Eagle Nest Park south along the west shore of Lake Fran and Shingle Creek to Conroy Road, while the 1.25-mile Phase II section will run along the Creek from Conroy Road and under Interstate 4 to the Mall at Millennia. This section of the trail will eventually be part of a 33-mile trail that will link central Florida from the West Orange Trail to Kissimmee.

***USDA Forest Service - Southeast Region*** – MACTEC was selected to provide structural and geotechnical services at park structures and locations in National Forests and Wildlife Management Areas throughout mid-Southeastern U.S. under a Master Services Agreement. Task orders will be assigned for the design of all or portions of a wide variety of Forest Service facilities, including but not limited to, buildings, water and wastewater systems, roads, bridges, dams, campgrounds, parking lots, retaining walls, pavement structures, stormwater treatment facilities and other constructed features that support the management of the National Forests and Grasslands. Initial task orders (TOs) have included: geotechnical, hydrologic and structural design to replace existing bridges and low water crossings; National Bridge Inspection Standards (NBIS) inspections and assessment surveys of 86 additional bridges; and geotechnical/hydrological field reconnaissance of two reservoir / storm retention dams. Since July 2007 MACTEC has been assigned 16 projects, including 14 bridges and low-water-crossing projects and 2 dam evaluations for safety and classification. Bridges have averaged lengths of 100 feet; ranging from 40 feet to 240 feet and are concrete and wood. Services have included

geotechnical, hydraulic and hydrology, surveying, and structural and civil (roadway) design. Projects have included:

***Bridge Replacement Design - Bridge 350-4.4 – Apalachicola National Forest*** – The existing bridge is a 12-span reinforced concrete slab bridge with concrete caps and timber piles. It was built in 1964 and is 240 feet in length with a curb-to-curb width of 22 feet. The bridge is located approximately 8 miles west of Crawfordville, Florida. MACTEC provided replacement design services that included removal of the existing bridge, concept plans for a replacement bridge, construction plans and specifications, an engineer's estimate of costs, and a calculation of contract days for construction scheduling.

**Summary**

In summary, MACTEC has the in-house staff resources, technical expertise, and experience to meet the specific needs of Leon County including designing and developing construction documents for a wide variety of park and recreational facilities. We are excited about the prospects of working with the Leon County in the ongoing development of their park facilities.

## *B3. Quality Assurance (QA)*

Quality work begins with planning and is supported by internal quality programs designed to ensure appropriate level of leadership, customer care, and technical competency which includes the use of current design standards, codes and regulations. MACTEC has comprehensive and proven quality assurance/quality control (QA/QC) personnel, procedures, and systems to ensure proper execution of all programs and projects. Quality is a project deliverable.

MACTEC's established comprehensive Quality Assurance Program dates back to 1975 and is fully supported from the CEO down. The program is administered by the Director of Engineering & Science, who reports directly to the President. A full time Quality Assurance Manager, reporting to the Director of Engineering & Science, is responsible for the Quality Assurance Manual and implementation of the Quality Assurance program.

MACTEC has a long and dedicated history of treating quality as a project deliverable. We believe that customer satisfaction is also indicative of quality performance, and our successes in this area are described in the next section.

MACTEC's QA Manual explains all engineering and science policies and follows the criteria for quality assurance outlined in the Code of Federal Regulations, 10CFR50, Appendix B, in ASME NQA-1 and F.A.C. 62-160. The system applies to all disciplines and scope of services. Provisions are included for incorporation of project or client-specific requirements. Topics addressed by MACTEC's Quality Assurance Manual include:

- Design Control (including standards, codes, regulatory requirements)
- Process Control
- Inspection
- Procurement and Control of Purchased Items and Samples
- Instruction, Procedures and Drawings
- Measuring and Test Equipment
- Identification and Control of Items and Samples
- Quality Assurance Records
- Personnel Training and Qualifications
- Contract Review
- Document Control
- Ethics
- Identification and Control of Nonconforming Items and Samples
- Handling, Storage and Shipping of Items and Samples
- Corrective and Preventive Action
- Computer Software and Hardware Control
- Quality Improvement

MACTEC's staff professionals are provided with technical and quality training and are required to obtain appropriate certifications and registrations prior to becoming designated by a review committee as a Principal Professional. Principal Professionals are assigned for each project and/or subtask and are responsible for directing, reviewing, and approving services that require engineering or scientific evaluation, interpretation, or professional judgment.

A cornerstone of MACTEC's QA system is the requirement that all calculations and date generated is reviewed by a peer or supervisor; and that all reports reflecting evaluation, interpretation or judgment be reviewed and signed by a Principal Professional.

*"MACTEC's report is clear, well-organized, and thorough."*
*Charles K. Ross*
*Progress Energy Services*

MACTEC enforces a formal corporate-sponsored internal Quality Assurance audit program directed by the Corporate Quality Assurance Manager. The purpose is to ensure quality control for each project at an office level. The audit accomplishes the fundamental task of verifying that the services provided to clients are being accomplished in compliance with existing technical and quality requirements. The audit teams consist of senior and corporate level personnel, independent of the function being audited. Audit results are reviewed and corrective actions implemented when required by appropriate levels of management. This process serves not only as an assessment of the technical and quality achievement of the project but also provides for interchange of technological advancements within the company.

For this contract, independent quality assurance/verification will be the responsibility of the QA/QC Managers. Their primary responsibilities include:

- Auditing files and reports to verify that QC accomplished as required.
- Performing unannounced audits and surveillances of project activities to review field, laboratory, and office work plans and procedures.
- Following up on necessary corrective actions.

A fundamental tenet of MACTEC's QA program is the assignment of staff who are qualified to perform their specific assignments. Principal engineers and scientists are assigned to provide oversight and review of all project elements. Junior staff are trained and certified as competent prior to executing any SOPs that they are assigned.

## *B4. Corrective Action Procedures*

Prevention and resolution of problems requires careful advanced planning and close communications between management and technical personnel in both client and contractor organizations. Our project experience has taught us that problems normally can be anticipated and resolved before they occur. The combined experience of the project team (including subcontractors) allows identification and resolution of most potential problems in the planning stages of the project. Examples of planning activities that are very successful in resolving problems before they occur include: identifying backup personnel and equipment and negotiating terms and conditions with subcontractors such as penalty clauses for nonperformance. However, should a problem occur, our project manager, office manager, and corporate representatives such as Mr. Scott Anderson, Vice President Southern Division, are involved in the corrective action process. This level of management has the authority and experience to address problems and develop alternatives to eliminate impact on the project schedule, budget and objectives. Anticipated problems and recommended corrective action will be communicated immediately to the County project manager. MACTEC understands that the County expects to be kept informed at all times and we are committed to fulfilling that project requirement. The Tallahassee, Florida location of our project manager

and key management and technical team representatives enhance our ability to effectively communicate and implement corrective action, as required.

## *B5. Resources*

MACTEC is uniquely qualified to assist the County in parks and recreational facility engineering. With over 400 personnel located throughout Florida in 9 offices representing over 50 scientific and engineering disciplines, MACTEC has all of the resources (staff and equipment) and technical disciplines required to complete a job of this type using in-house resources. Our in-house design services include: architectural services, recreational and park facility design, civil site design, bridge design, geotechnical engineering, structural design, pavement design, utility and power design, environmental engineering, value engineering and constructability review. Using in-house resources MACTEC can also provide surveying, utility locates, permitting, material testing and construction management services.

**Staffing**

With MACTEC's extensive multiple discipline capabilities, we are ready and capable of completing all of the park and recreational facility improvement designs required under this contract and assisting the County in the construction phase utilizing our in-house staff. This in-house turnkey approach typically saves our clients time and money. In addition to the civil engineering services, MACTEC can also provide these services to the County:

- Our facilities engineering services include building condition surveys, asbestos & lead-based paint management, indoor air quality, mold & mildew, life cycle cost studies for systems, mechanical, electrical & plumbing systems, roof and pavement evaluation & management programs and structural analysis.
- Our environmental services include site assessment and site remediation, comprehensive liability assessment and management, permitting, and underground tank management.
- MACTEC's risk assessment and ecology services include human health & ecological risk assessments, natural resource damage assessments and management studies, wetlands and lake assessments.
- Water resource services include hydrologic and hydraulic engineering, modeling, stormwater management, water quality studies and watershed management.
- Land development services (excluding engineering services) include architectural and landscape architectural services, parks and recreation system planning, historic preservation, certified arborist, cultural resource surveys including in-house archeologists, and Phase I & II site assessments,
- Survey Services – MACTEC is registered as a surveying company with the Department of Business and Professional Registration and has been providing surveying and mapping services in the state since 1987.
- Additional Support Services include utility locate services, material testing laboratories and a toxicology laboratory.
- Communications, outreach and public education services are conducted by communication specialists comprised of accredited public relation specialists, writers/editors, graphic artists, Web designers, video producers and information specialists. Our resources are enhanced by our in-house facilities and equipment, including a broadcast-quality video studio, color printing capabilities, photographic laboratories and a high-volume production center.

## Equipment

The MACTEC Tallahassee office maintains a full array of environmental sampling and monitoring equipment necessary for soil, sediment, sludge, surface water, air, and groundwater sampling programs.

Equipment categories include field analytical equipment, soil and groundwater sampling equipment, drum sampling equipment, air (ambient and personnel) sampling equipment and health and safety equipment. In addition to this equipment, MACTEC maintains a supply of expendable materials such as tubing, sample containers and preservatives at the Tallahassee location. A list of available equipment is supplied below.

**MACTEC**
**General Field Equipment and Instruments**

| | |
|---|---|
| **Field Instruments** | **Pumps** |
| pH meters (Lamotte Chemical Products Model Ha-pH meter and Myron L. Company Model EPII/pH) | *Positive Displacement* |
| Conductivity meters (Trimar Industries Model 333 Tripar Meter) | Submersible (turbine, helical rotor) |
| S-C-T meter (YSI Instruments) | Submersible (gear drive) |
| OVA | Bladder pump |
| Photoionization analyzers | **Suction Lift Pumps** |
| Flame ionization detector | Centrifugal |
| Portable gas chromatorgraphs (HNU Model 311) | Peristaltic |
| Data logger (ORS Interface Probe and ORS Model EL-200 GW Monitoring System) | **Geophysical Instruments (specialty equipment)** |
| Drager multi-gas detector | Global Positioning System |
| Methane meter | Earth resistivity |
| Hydrogen Sulfide meter | Ground penetrating radar |
| Explosimeter | Magnetometer |
| Oxygen indicator | Nuclear densiometer |
| Field grade thermometers | Seismograph |
| Water level indicators | **Miscellaneous Equipment** |
| Water level recorder | Surveying equipment |
| **Sampling Equipment** | Decontamination apparatus |
| Bailers, Teflon and stainless steel | Boats with motors |
| Stainless steel and Teflon spoons, trowels, scoops, spatulas and buckets | Stainless steel and Teflon mixing bowls and trays |
| Surber sampler | **Heath and Safety Equipment** |
| Van Dorn | Levels B, C and D protection |
| Dip nets/kick nets | Suits, Tyvek, Gloves |
| Coliwissa tubes/glass tubes | Breathing apparatus, SCBA |
| Hand augers | |
| Ponar dredge | |
| Soil corers (including DPT, KV macho system) | |
| Pumps (positive displacement and suction lift) –see below | |

The uses of the equipment are briefly described as follows.

- **Field Sampling Equipment:** soil and groundwater assessment.
- **Field analytical equipment:** field analysis for assessment and remediation.
- **Geoprobe Rigs:** soil and groundwater sample collection and well installation.
- **Specialty Equipment:** geophysical surveys, land surveying.
- **Personal protective equipment:** health and safety.
- **Remediation Equipment:** soil and groundwater cleanup.

Additional equipment is available from other MACTEC offices, our regional equipment warehouse or from preselected equipment supply rental companies. Equipment from these locations can be shipped overnight to any project site location.

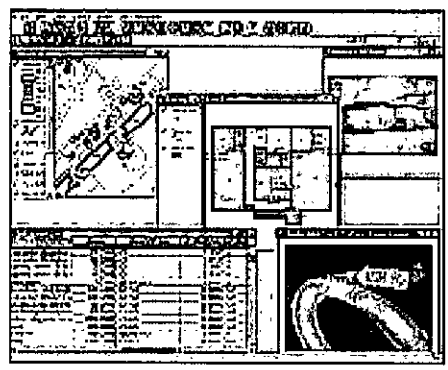
Any specialty equipment such as geophysical equipment that is not available from the Tallahassee office can be readily obtained through other MACTEC offices or through equipment rental companies.

MACTEC also maintains 4-DPT (Geoprobe) rigs in Florida that are available for environmental, geological and geotechnical investigations. In addition, MACTEC also maintains a state-of-the-art utility locate rig. The Tallahassee MACTEC office has a mobile remediation system that is capable of conducting short-term groundwater air sparging and soil vapor extraction pilot tests and site cleanups.

All of our equipment is maintained (calibrated, decontaminated, etc) by trained MACTEC equipment technicians. Routine maintenance is performed at our Tallahassee office location according to MACTEC's FDEP CompQAP.

Expendable equipment is stocked in the Tallahassee office location. Preselected vendors have been identified for all expendables that might be needed for any assessment project. These materials can be overnight shipped to any project location. In addition, a water filtration system for "organic free" water is also maintained in the Tallahassee location for equipment decontamination procedures.

Additional resources for this Work Category include hardware and software. MACTEC has extensive experience in the development and use of innovative GIS, CADD and information management systems. MACTEC utilizes the latest versions of AutoCAD™, including 2009, and its vertical applications, Map and Land Desktop™, in the preparation of project design drawings and certified record architectural /engineering drawings including as-built condition drawings. We have over 100 CADD/GIS specialists who are trained and experienced in the latest versions of CAD and GIS software such as AutoCAD, Mircrostation, ArcGIS and Geomedia. Licensing for these applications is shared across the company wide area network (WAN). This enables CAD operators in any MACTEC office to access all design/drafting software. CAD software is installed on workstations running the Microsoft Windows XP® operating system and connected to servers in each office running Microsoft Windows Server®. MACTEC also utilizes MicroStation V8™ and its vertical applications such as GEOPAK® and InRoads® and they are network licensed in the same fashion as our AutoCAD applications. Through these varied platforms, operating systems, and network configurations, MACTEC is capable of meeting the County's program specific requirements.



Design Standards -- MACTEC routinely creates design drawings using the U.S. National CAD Standard (NCS) or other standards as directed by the client. The NCS coordinates the CAD requirements of multiple organizations. The NCS was created through consensus with public and private organizations and the entire building construction community. The standard includes guidelines and standards for sheet layout, drawing conventions, schedules, symbols, and layer and plotting guidelines. Having been peer-reviewed by the construction community these standards provide contractors with clear and concise direction.

Standard design details as well as master specifications are maintained on the company ActiveProject web site for engineering design. Design modules are also maintained for engineered systems that are commonly applied for facility engineering. Mechanical, electrical, structural, architectural, and civil site works are controlled by facility design engineers that are well practiced in the particular discipline. The Discipline Lead maintain links to manufacturers and the construction community to revise the standard as new or better methods are developed. Design drawings are developed under the direction of a licensed professional engineer and then reviewed and approved by the manager of design before issuing to the client. Mark-ups are systematically reviewed by the CADD checker prior to plotting. Interdisciplinary coordination is managed by a quality assurance coordinator assigned by the manager of design.

GIS and AIT -- MACTEC also offers high quality consulting services to assist in the design, development, and implementation of Geographic Information Systems (GIS) using ArcView software for environmental, engineering, land use planning, and other complex problems that require the use of modern tools to meet the needs of today's decision makers. By combining information technology experts with engineers and scientists who are familiar with the needs of our public and private sector clients, MACTEC is able to offer cost-effective solutions for the growing demand for infrastructure and environmental concerns faced by local governments, federal agencies, and private organizations across the country.

MACTEC also provides applied information technology (AIT) services through a collaboration of computer technology specialists located throughout our network of offices. We provide clients with cost effective data management tools that increase the value of their data investment while making the data more useable and accessible. The collection of technologies used by MACTEC's AIT professionals include database, GIS, GPS, CAD, web programming, geophysics, 3D visualization, and general application programming. Specifically, MACTEC is capable of producing, converting and translating its graphical images to Intergraph, MicroStation, or AutoCAD file formats. Our CADD workstation platforms running a broad array of CADD applications will allow a seamless transfer of files from and/ or to the County.

MACTEC has the staff resources and experience to assist the County in maximizing the number of projects that can be successfully implemented under this contract given the current limited budgets available. Our staff includes registered engineers and geologists as well as scientists and technicians. MACTEC's full service staffing and equipment capabilities will allow for comprehensive field-to-finish capabilities, from project "concept to completion".

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

EXAMPLE PROJECT KEY NUMBER: 1

NAME AND LOCATION OF PROJECT *(city and state)*: City of Tallahassee, Four Points Trail Head, St. Marks Trail, Design and Construction Plans, Tallahassee, FL

YEAR COMPLETED

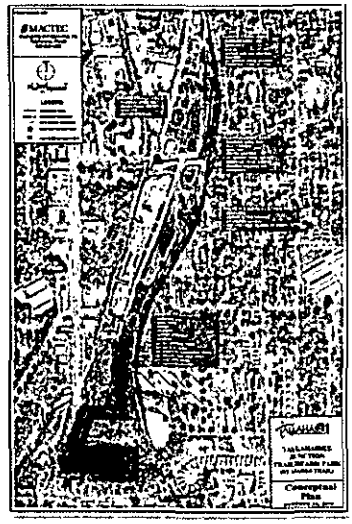
| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2010 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT USER AGENCY'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Susan Tanski, Senior Planner | City of Tallahassee, Parks and Recreation Department<br>912 Myers Park Drive<br>Tallahassee, FL 32301 | 850.933.0345 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

MACTEC has recently provided design, planning and engineering services to the City of Tallahassee for various trails and trailhead projects. The Tallahassee Junction Park Conceptual Plan project consisted of the preparation of a conceptual plan for the Tallahassee Junction Park and trailhead. The 24 acre linear park is located at the junction of the Tallahassee to St. Marks Historic Railway Trail and the proposed G F & A Trail. The conceptual plan included outdoor recreation uses, trail layout and connections and recreation amenities, as well as general locations for trails, access, parking and wildlife viewing areas around the existing stormwater ponds. Following acceptance of the conceptual plan, a master plan was developed for the northern portion (Phase 1) of the project. The master plan shows specific locations and sizes for all proposed park amenities in accordance with the conceptual plan. The park amenities were planned with a railroad theme in keeping with its trailhead functions for the St. Marks Trail and future connections to the G. F. & A. Trail. Phase 1 includes four main areas of focus: a neighborhood playground, a basketball court, an exercise trail, and a trailhead for the St. Marks Trail. The project included construction plans for parking, a sheldter, and other amenities for in-house construction by City staff. The project also incorporated principles of the Crime Prevention Through Environmental Design (CPTED) program.



KEY PERSONNEL

| | PERSONNEL NAME | ROLE |
|---|---|---|
| a. | Larry Schenk, ASLA, CA | Project Manager, Park Planner |
| b. | Charlie Phillips, RLA | Park Planner |
| c. | Vanessa Crisler | CADD/GIS |
| d. | | |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 2

NAME AND LOCATION OF PROJECT *(city and state)*: City of Tallahassee, Fern Trail Underpass Improvement, Tallahassee, FL

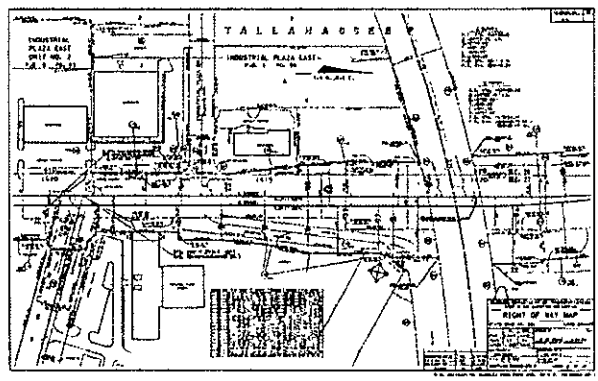
YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2010 | N/A |

PROJECT OWNER'S INFORMATION

| AGENCY'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Mr. Chuck Goodheart, Park Management Specialist | City of Tallahassee, Parks and Recreation Department<br>912 Myers Park Drive<br>Tallahassee, FL 32301 | 850.933.6631 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT




The City of Tallahassee contracted MACTEC Engineering and Consulting, Inc. to determine the feasibility and permittability of improving the safety and condition of an existing 15-20 year old dirt trail which was built by user groups. The trail runs from the edge of downtown Tallahassee through Governors Park then on to Tom Brown Park and beyond following the old "Mosquito ditch (City of Tallahassee) and crosses into CSX right-of-way just west of Capital Circle NE and goes under the FDOT Capital Circle Bridge over the CSX tracks and then back onto City of Tallahassee right-of-way by the National Guard Armory.

MACTEC was then tasked to design the trail improvements. MACTEC's proposed trail improvements consisted of relocating the trail segment underneath the Capital Circle Bridge away from the CSX tracks and providing fencing along the entire trail segment on CSX right-of-way to direct users away from the tracks and improve safety. The cost saving trail improvement design for Fern Trail was developed at a level sufficient for in-house or volunteer trail association members to implement.

KEY PERSONNEL

| | PERSONNEL NAME | ROLE |
|---|---|---|
| a. | Larry Schenk, ASLA, CA | Project Manager, Park Planner |
| b. | Vanessa Crisler | CADD/GIS |
| c. | George Burton | CADD/GIS |
| d. | | |

| EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT | EXAMPLE PROJECT KEY NUMBER |
|---|---|
| | 3 |

| NAME AND LOCATION OF PROJECT *(city and state)* | PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|---|
| City of Tallahassee, Greenway Connection Study, Tallahassee, Leon County, FL | 2011 | N/A |

**PROJECT OWNER'S INFORMATION**

| AGENCY'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Susan Tanski, Senior Planner | City of Tallahassee, Parks and Recreation Department<br>912 Myers Park Drive<br>Tallahassee, FL 32301 | 850.933.0345 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

MACTEC was contracted by the City of Tallahassee to conduct a greenway connection study to prioritize needed trail connections within the Tallahassee-Leon County Trail System. MACTEC conducted a survey of major trail user groups, city and county parks personnel and FDEP Office of Greenways and Trails personnel to determine the top five trail connectors that need to be developed based on these user groups responses. Suggested alignments and alternate routes for each of the connectors were then developed by MACTEC. In addition, MACTEC provided the City with potential procurement issues and possible solutions for acquiring needed properties in the proposed areas. A proposed trail maintenance classification system that could be used for determining future operating budgets was also developed by MACTEC.

**KEY PERSONNEL**

| | PERSONNEL NAME | ROLE |
|---|---|---|
| a. | Larry Schenk, ASLA, CA | Project Manager, Park Planner |
| b. | Jack Davis | Principal |
| c. | Vanessa Crisler | CADD/GIS |
| d. | | |

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 4

NAME AND LOCATION OF PROJECT *(city and state)*

**Wire Grass Trail Improvements**
**Falling Waters State Park, Chipley, Florida**

YEAR COMPLETED

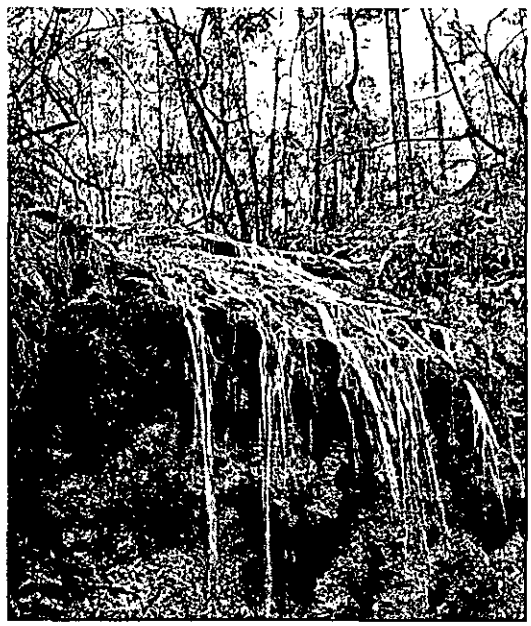
| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2010 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT OWNER'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Ronnie Hudson, Park Superintendent | Falling Waters State Park<br>*1130 State Road*<br>Chipley, Florida 32428 | 850-638-6130 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

The Florida Department of Environmental Protection, Division of Recreation and Parks, Bureau of Design and Recreation Services, tasked MACTEC to design a trail from the existing parking area to the swimming area restroom facilities to replace a non-ADA compliant existing trail. The scope of work included providing professional land surveying services and developing conceptual plans for a new ADA compliant trail route. After selection of the conceptual plan MACTEC was tasked to design the trail to include a covered pedestrian bridge, kiosk, trailhead, boardwalk and ADA compliant parking. Upon approval of the trail and associated features design, MACTEC prepared construction bid specifications for the project.



KEY PERSONNEL

a. PERSONNEL NAME
Jack Davis, Project Manager

b. PERSONNEL NAME
Charlie Phillips, Registered Landscape Architect

c. PERSONNEL NAME
Larry Schenk, ASLA, CA, Park Planner

d. PERSONNEL NAME
Vanessa Crisler, CADD/GIS

| EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT | EXAMPLE PROJECT KEY NUMBER |
|---|---|
| | 5 |

NAME AND LOCATION OF PROJECT *(city and state)*

**Croom Motorcycle Area, RV Campground**
**Withlacoochee State Forest, Hernando County, Florida**

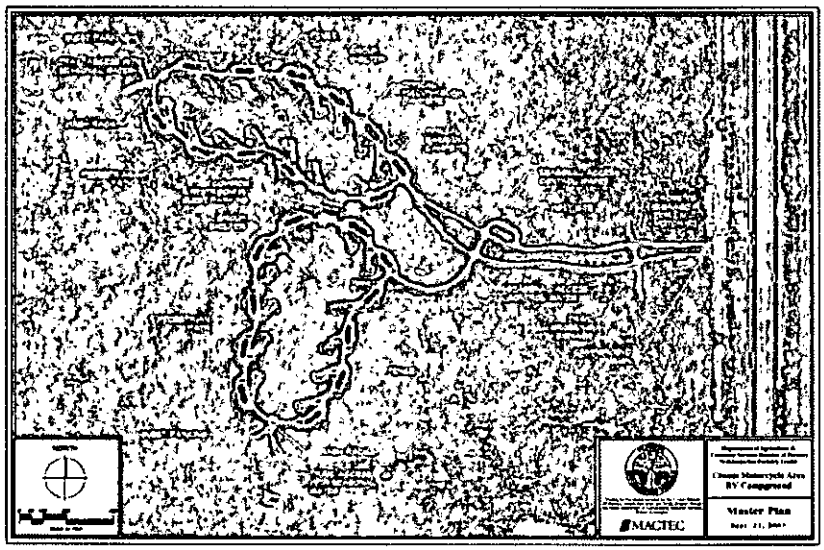
| YEAR COMPLETED | |
|---|---|
| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
| 2007 | N/A |

PROJECT OWNER'S INFORMATION

| PROJECT OWNER'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Joe Tyberghein, Recreation Administrator<br>Withlacoochee Forestry Center | Division of Forestry<br>Dept. of Agriculture and Consumer Svcs<br>15003 Broad Street<br>Brooksville, FL 34601 | 352.540.6064 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

The Croom Motorcycle Area (CMA) is located within the Withlacoochee State Forest, northwest of the intersection of Interstate Highway 75 and State Road 50 in Hernando County, Florida. The CMA includes 2600 acres of hardwood hammocks, scrub forest, and pits left from historic mining operations. The CMA was set aside as trails and riding areas for off-highway motorcycles and all terrain vehicles (ATVs).




The Withlacoochee Forestry Center (WFC) initiated the project to develop a new 50-unit RV Campground in the southern part of the CMA. Following on-site meetings with the client and data collection, MACTEC prepared three alternative master plans for the campground incorporating options for layout, utilities, and associated facilities. The preferred alternative was selected in a second client meeting and the final master plan was developed. An engineering report was also prepared to present opportunities and limitations for utility services and roadway design, including estimated costs for each alternative.

The master plan incorporated specialized features needed to serve the all-terrain vehicle and off-road motorcycle enthusiasts that use the CMA, such as over-sized camp spaces, vehicle-pedestrian conflict control, vehicle wash-racks, and trail access points.

KEY PERSONNEL

a. PERSONNEL NAME
Jack Davis, Project Manager

George Burton, CADD

b. PERSONNEL NAME
Larry Schenk, ASLA, CA, Park Planner

c. PERSONNEL NAME
Charlie Phillips, Registered Landscape Architect

d. PERSONNEL NAME
Vanessa Crisler, CADD/GIS

**EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT**

EXAMPLE PROJECT KEY NUMBER: 6

NAME AND LOCATION OF PROJECT *(city and state)*: **Lake Conine Watershed Restoration and Stormwater Treatment Services, Winter Haven, FL**

YEAR COMPLETED

| PROFESSIONAL SERVICES | CONSTRUCTION *(If applicable)* |
|---|---|
| 2010 | N/A |

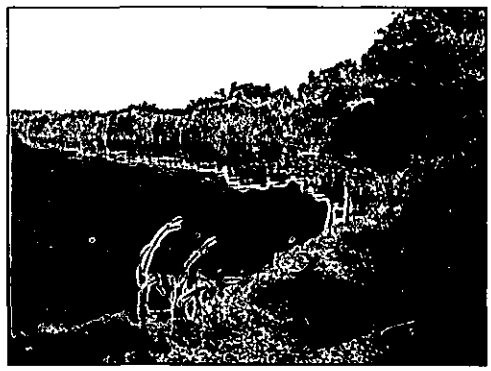
**PROJECT OWNER'S INFORMATION**

| PROJECT USER AGENCY'S REPRESENTATIVE NAME | ADDRESS | TELEPHONE NO. |
|---|---|---|
| Mike Britt, Natural Resources Division Director | 451 Third Street, NW<br>P.O. Box 2277<br>Winter Haven, FL | 863-291-5600 |

NATURE OF THE FIRM'S RESPONSIBILITY ON THIS PROJECT

The City of Winter Haven, Florida retained the services of MACTEC to design and secure permits for the South Lake Conine Watershed Restoration Project on a city-owned, 34-acre, vacant lakefront parcel. Work included design of a regional stormwater pond and a stormwater treatment train, to finish with a polishing wetland before cleaner water was discharged to Lake Conine, an impaired water body with a nutrient TMDL. The design also included development of recreational features such as picnic pavilions, canoe/kayak launch facilities and trail.

The MACTEC team also provided the City with bidding and construction services and with post-construction water quality monitoring. More specifically, project design included wetlands delineations and assessments, geotechnical investigations, boundary and topographic survey, watershed modeling, stormwater pollutant load modeling, stormwater treatment train design, and park design. The water quality treatment pond was sized to treat at least the first inch of runoff from the 236-acre contributing basin.



Project design also included the restoration of a 6.6-acre impacted wetland located in the north central portion of the project site. Wetland assessments were conducted utilizing Florida's UMAM method of quantifying existing and proposed wetland and habitat restoration characteristics. The design of the recreational features incorporated a nature park theme, which has met with popular approval by the City.

**KEY PERSONNEL**

| | PERSONNEL NAME | ROLE |
|---|---|---|
| a. | Charlene Stroehlen, P.E. | Project Manager |
| b. | Ann Shortelle, PhD | Principal Scientist |
| c. | Larry Schenk | Park Planner |
| d. | | |

## C. Willingness to Meet Schedule and Budget Requirements

**Schedule and Cost Control:** Key to our project successes and satisfied clients is our ability to provide an integrated well managed approach involving teams of experienced engineers, scientists, technical and support staff who can deal successfully with every phase of a project lifecycle, from planning through design, permitting and construction management. MACTEC's project management approach and strategy for any project tasked to us by Leon County has been designed to maximize the efficient execution of each task and to ensure your satisfaction. Our management process is proven to be one of the most efficient processes for controlling numerous activities in a timely and cost-effective manner. These processes have been tailored to meet the individual needs of our clients. As a result of MACTEC's ongoing working relationship with many government agencies, the contract requirements for this project have already been incorporated into our project management system.

MACTEC believes that strong and effective management is the most critical component for successful completion of a project. At MACTEC, strong project management means:

- Listening carefully to our client's concerns before starting a project and asking probing questions to determine their specific objectives;
- Treating schedule and budget considerations as firm commitments, not just objectives;
- Communicating clearly and interacting frequently with the client, alerting the client to significant developments, work progress, budgetary issues, and other items of concern as soon as practical, with the goal of eliminating surprises; and
- Recognizing any internal staffing and technical limitations, and discussing these issues openly with the client to develop an appropriate response.

MACTEC's project management procedure and strategy for each component of a project is designed to maximize the efficient execution of each task and to ensure the County's satisfaction. Our management process has enabled MACTEC to consistently control numerous activities in a timely and cost effective manner for hundreds of clients on thousands of individual projects.

**a) Schedule Control:** Timeliness is a critical issue for our clients and is a key to completing projects within budget. Therefore, MACTEC is dedicated to meeting the agreed upon schedule of all explicit and implied commitments made to clients, without sacrificing the established scope, budget, and quality. MACTEC accomplishes schedule control through early and careful project planning, measuring performance against plan, evaluating corrective actions as needed, and communicating all information to our in-house project team as well as Leon County personnel in a timely manner.

Project resource needs (personnel, equipment, subcontractors) will be identified during the planning process. Every subtask of the project is evaluated from a resource and scheduling basis. A project schedule is formulated based on the County's needs and resource requirements. These resources are then committed to this project. In addition, alternative resources are also identified during the planning stage. During the planning process, we try to anticipate problem areas and develop contingency plans.

Once a project schedule has been developed, the MACTEC Project Manager tracks the project schedule in a clear and concise manner utilizing one of MACTEC's data management systems, such as Microsoft's Project Manager software and our email software, Microsoft Outlook, to monitor the schedule of individual events.

Overall, our time tested schedule control system has allowed for the successful execution of work ranging from single-phased projects to multiple-site, multiple-task, and multiple-year programs. Under our assessment contracts with the FDEP, Bureau of Land Acquisition, MACTEC has completed over 1,500 individual task assignments to date. Deliverables for these task assignments have been on time or early!

**b) *Cost Control:*** It is MACTEC's objective that each task assignment be completed at the lowest possible cost to the client. The first step in cost control is developing an accurate scope of work that details all of the resources needed to accomplish the immediate task and a detailed plan on how to accomplish the task in the most efficient manner. To develop this work plan, MACTEC relies on its senior staff of experienced, technically trained engineers and scientists. Our staff is qualified in planning, design and construction management and is experienced at managing those disciplines in Florida's rapidly changing environment.

MACTEC's ability to plan and design technically sound, cost efficient projects that meet our client's needs and to successfully implement them within the stated budget (and schedule) is based on the following factors:

*Technical Expertise:* MACTEC has all of the technical disciplines required to successfully execute projects assigned to us under the work cataegory "Parks and Recreational Facility Engineering". Our staff also has the "real world" experience of conducting projects that require the same disciplines. These technical capabilities and experience enables MACTEC to develop project scopes that are technically sound and cost efficient. Examples of cost saving approaches that could be applicable to this contract include:

*Varying Project Design Levels:* With shrinking budgets available for completing many trail improvements, the use of in-house staff and/or volunteer staff to construct some trail improvement projects has been a successful cost saving procedure for some of our clients. These types of projects do not require the same level of construction documents to be developed as would a project that would be put out for bid to a commercial contractor. MACTEC has recently developed a cost saving trail improvement design for the City of Tallahassee's Fern Trail at a level sufficient for in-house or volunteer trail association members to implement.

*Specialized Expertise:* During the past 40 years, MACTEC has been undertaking pavement engineering projects around the world. Using sound engineering principles, MACTEC uses the latest developments in data acquisition and manipulation, analysis techniques and infrastructure management tools to provide cost-effective solutions that minimize risk and optimize asset performance. Benefits to our clients include more accurate identification of current and future needs, more effective improvement programs, and a better basis for prioritization of funds and resources allocations. These pavement management processes can be easily adapted to the unique requirements of a paved multi-use trail.

MACTEC also has the same type of assessment capabilities for facilities. These facility management capabilities will allow us to help the Leon County prioritize limited maintenance dollars on offices, shop area, restrooms, and other trail structures. We have successfully offered these services to hundreds of private and governmental clients around the country.

Additional factors that we believe enable MACTEC to execute technically sound and cost efficient projects include the following:

*Experienced/Qualified Staff:* The concept and design of projects associated with parks and recreational facilities must be constructible and affordable in Florida's construction marketplace. The key to a successful construction project in Florida is in a team being proactive rather than reactive. *MACTEC has a tremendous amount of experience in Florida dealing with contractors as construction managers and as designers.* This allows us to fully understand and anticipate potential fatal flaws that may come up in the design process, the bidding process, or the construction process. The following points outline effective and cost saving elements that we use to ensure a successful project.

*Construction Estimate:* The key to managing the construction bidding process is the development of an accurate and current construction estimate. Because of our experience in both design and construction, and more importantly our experience in Florida, we understand what it costs in today's market to build a project. We routinely prepare construction estimates for our clients based, not on 5 year old averages, but on empirical data obtained from recent, similar projects in the area.

*Knowledge of Construction Industry:* Through our management of construction contracts our staff has a great deal of knowledge of the state of practice in the construction industry. We know the contractors and their abilities as well as current issues that are affecting the industry, such as the pricing of construction materials and the unit costs that are being charged or the availability of materials such as concrete.

*Construction Project Management Abilities:* We know how to manage a construction project. We are currently managing several construction projects for the FDOT and FDEP. We can manage schedule, utility conflicts, maintenance of traffic, claims, weather, etc... We use established methods and guidelines like the Construction Project Administration Manual to effectively manage projects.

*Support Services:* Time is a big factor during a construction project. A good team will anticipate potential delays and make provisions to alleviate them before they impact the schedule. MACTEC offers all of the support services that may be needed during both design and construction to reduce the turnaround time necessary to get a subconsultant activated. Our ability to offer survey, geotechnical services, environmental services, archeological assessments, etc... and to have those resources activated immediately will ensure the project progresses smoothly. Our support services also include materials testing with fully certified labs, including asphalt plants.

*Procurement:* As a large Federal government contractor, MACTEC uses a government-approved process for procurement activities for all client contracts. The objective of the procurement activities is to prequalify and establish partnerships with pre-negotiated terms and conditions, including penalty clauses for nonperformance to assure that the terms and conditions and rates established are the most favorable to the County.

As part of our procurement process, MACTEC requires all of our subcontractors to satisfy stringent requirements for liability insurance coverage, health and safety compliance, quality assurance plus other client- or site-specific performance requirements. All final subcontract agreements include cost, schedule, required scope and performance measurements.

Once the procurement process has been completed the control of subcontractor performance from a quality, performance, and schedule standpoint is very critical to the overall success of the task assignment. Effective management of subcontracts is accomplished through early, clear definition of project objectives at the planning stage prior to start of the effort to re-affirm commitment to the schedule and work scope.

The subcontractor staff (and equipment) will be integrated as required into each assignment. Subcontractors will not be given independent assignments for accomplishment but will fully participate in the integrated MACTEC Team process. Subcontractor assigned staff will be technically and operationally controlled at the lowest possible level, to provide integration into the assigned activities.

*Project Execution:* Once the scope of work is developed, experienced personnel and appropriate technologies are assigned to the project. Our ability to routinely provide "local" resources to local projects also enables MACTEC to help minimize project costs to our clients. The next step in cost control during the project planning stage is to develop project schedules that keep costs down and optimize all phases of the project.

Once the scope of work has been defined, the appropriate resources committed to the project and a schedule established the final step in cost control is the actual project execution or simply stated doing what you said you were going to do! This involves executing the proposed plan with the appropriate resources and experience level to get the job done right the first time.

During project execution MACTEC will accomplish budget management and cost control through careful project execution, regularly measuring performance against the plan, evaluating corrective actions as needed, and communicating this information to the project team and client in a timely manner. MACTEC uses the Oracle® Financial System for direct electronic access and interaction with the company's main office accounting files.

PM Dashboard, an in-house project management tool allows our project managers continuous monitoring of the Oracle® Financial System. The PM Dashboard is rich with data and features, including links to other projects with similar information. This project management tool provides the project manager a set of Key Performance Indicators (KPIs) that alert the project manager to potential issues before they become problems. Project control is maintained by detecting any deviations from the original plan in the early stages allowing for corrective actions to be implemented. MACTEC has a consistent and documented history of successfully completing time and materials, firm fixed price and cost plus contracts for both government and private sector clients. By following our tried-and-true cost control processes, we are confident that budgets for all of the projects tasked under this contract will be managed successfully.

*"...During the past six years, MACTEC has done outstanding work and the project has gone very well, and I am very pleased with the technical quality, schedule and client service that MACTEC provides. I am particularly pleased with their innovative approach to getting the job done economically & efficiently..."*

*Lynda Godfrey, Chief*
*Bureau of Land Requisition*
*Florida Department of Environmental Protection*

# D. Effect of Firm's Recent, Current and Projected Workload

Like any other consulting organization, our engineers, scientists and technicians work on multiple projects at any given time. With 3,000 associates located in 80 offices nationwide, our client base includes local, state and federal governmental agencies as well as private clients. For the past 28 years, MACTEC staff in our Tallahassee office has been continuously providing consulting services to the Florida Department of Environmental Protection. Under multiple contracts, MACTEC is currently providing services to the FDEP Program & Technical Support Section and Brownfields Section (HW526), Site Investigation Section (GW212), Office of Greenways and Trails, the Division of Waste Management, the Division of State Lands, and the Division of Recreation and Parks. In addition, we have just completed a trail connector study for the City of Tallahassee and an asbestos/lead based paint abatement oversight project for FAMU. Because the nature of our business necessitates working on multiple projects for multiple clients, MACTEC has the resources and management tools available to effectively manage staff and resources for working on multiple projects for multiple clients.

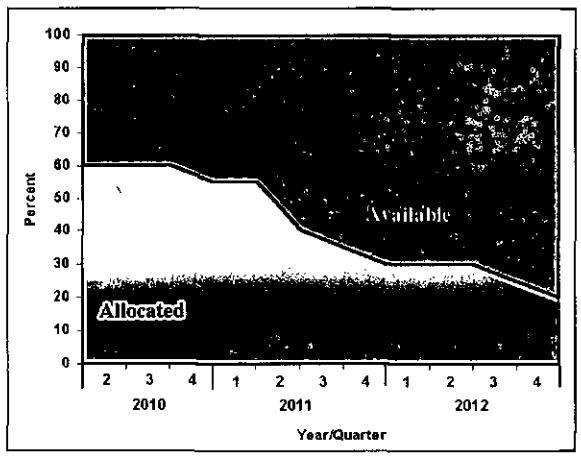
Our scientists, engineers, and technicians are available to meet the needs of the County as they arise under the contract. We are able to offer this availability due to our understanding of the project requirements, our experience in conducting similar projects, our project management support system (including state-of-the-art cost and schedule control systems), and our unmatched staff resource pool. MACTEC is committed to increasing the manpower available for this Contract by transferring associates from other project groups should the scope of any project under this Contract exceed our current contract resource projections.

***Staff Continuity***

MACTEC prides itself in the fact that there is very little turnover of our staff enabling us to keep qualified personnel dedicated to projects and programs for the extent of their contracts. The key personnel we have identified in our proposal are fully committed to assisting the County design and implement new features and improvements throughout the County's park system. As technical discipline leaders, they will provide leadership continuity throughout the project. During the early planning stages of the project as teams are formed, additional staff will be assigned based on technical expertise and availability. With over 3,000 associates and a proven management system, MACTEC has the resources and tools available to effectively manage staff continuity for this Contract. MACTEC continues to be excited about the chance to work with the County on projects throughout the park system. You have our commitment that all identified MACTEC personnel are available throughout t he life of the contract to assist in successful park development and improvement projects.

**Manpower Availability Chart**

***At the beginning of the project the combined availability of key MACTEC team members is approximately 60%. Our team is available to the County 24/7 to successfully support this project.***






MACTEC

***Total Workload During the Project Period***

Typically MACTEC's staff is approximately 30% available at any time. Firm contracted workload in March 2011 is approximately 65%, while we reasonably expect additional assignments in the short term. Based on these statistics, and MACTEC's understanding of Leon County's requirements, this level of availability exceeds Leon County's peak staffing requirements. Availability increases during the life of the contract. At the current time, we anticipate greater than 40% availability of the project team by September 2011. MACTEC can readily meet Leon County's needs on Day One and throughout the life of the contract.

MACTEC will assign key staff to the project with appropriate experience and has committed to Leon County that the appropriate experienced resources will be made available for this project as the need arises. MACTEC has committed each resource to a minimum of 25% of their time should the County need that person. That amounts to approximately 500 hours per person on an annual basis. This percentage can easily be increased based on a scoping need. Many of the project staff can be made available as much as 50% to 90% of the time and the senior technical staff can easily be made available 40% to 75% of the time based on the project needs. The most important item to take from this discussion is that all key staff is available and have sufficient availability to meet the County's project needs. Mr. Schenk, the proposed project manager, will ensure that the right resources are made available throughout the established project schedule.

MACTEC fully understands that the County is looking for an engineering consulting firm that can provide the County with professional architectural and engineering services for park development/improvement projects in Leon County. Our people are highly trained professionals. Our management and operating procedures have been developed and tested using "real" world experiences. With nine offices located in Florida and one of them within minutes of the County's offices, MACTEC has the resources in place to effectively execute this contract in a technically sound, cost effective manner. This formula for providing clients quality service in a timely manner has been proven to be successful by our many satisfied, "repeat" business clients. The MACTEC team proposed for this contract is capable of and committed to providing the County with all of the resources necessary to ensure that the County's goals and objectives for park development and /or improvement projects in Leon County are successfully accomplished.

# E. Effect of Project Team Location

## *Location*

MACTEC has maintained an office in Tallahassee for over 28 years. Our proposed project office for this contract work is our Tallahassee office. Additional staff resources and expertise are available from our other Florida offices as well as 90 additional offices nationwide. Staff located in these offices includes civil engineers, transportation engineers, geotechnical engineers, stormwater engineers, environmental engineers, geologists, environmental scientists, engineering technicians, CADD operators as well as survey crews, geotechnical crews, utility locate crews, and certified construction managers.

Mr. Schenk is MACTEC's designated project manager for this Contract. Located in our Tallahassee office, Mr. Schenk is located within 5 miles of the County's office. As project manager, Mr. Schenk will be responsible for MACTEC meeting all of the program goals for technical quality as well as for meeting all financial and schedule commitments. His local presence facilitates "face-to-face" communication with County staff. In addition all proposed subcontractors are located within Leon County further facilitating "face-to-face" communication with the entire project team.

MACTEC is working on projects located around the world. To successfully accomplish this work, we have developed a technically strong staff, state-of-the art information system and project management procedures that allows us to collaborate with each other and produce quality deliverables no matter the project location. Being residents of Leon County, our Tallahassee staff have a working knowledge of the area and with our ability to access resources/expertise on a national level, we truly believe that we are perfectly located to provide the County the expertise, experience and resources to develop parks and recreational facilities in a technically sound, cost efficient manner. If personnel from outside of the Tallahassee office are required, use of email, access to files by computer servers and ftp sites, conference calls and networked meetings facilitate routine networking and communicating across offices.

Our commitment to provide superior comprehensive services to the County is centered on the expertise and experience of MACTEC, which consists of a complementary mix of PhD's, principal scientists, senior level engineers, project engineers, experienced project managers, surveyors, technicians, and dedicated professional staff. MACTEC offers the County a unique resource base of individual strengths blended together into one Team. Accordingly, we can provide the full range of services required to complete the scope of this project in a seamless manner.

MACTEC is ready to hit the ground running in support of this contract. Our in-house facilities and effective management approach ensure projects performed by our professional engineers and scientists stay on schedule and are completed within budget constraints. We are confident that the knowledge and experience gained while working on projects similar in scope and complexity will enable a smooth execution of projects for Leon County. The local knowledge and experience with similar projects in Leon County, the understanding of local issues, and the desire to improve and maintain the quality of life in the area drive each team member to be highly responsive to the Leon County needs.

# F. Approach to the Project

## *Project Approach*

No matter the size or complexity of the project, MACTEC has learned that the key to a successful project is understanding the project requirements, identifying key issues, developing plans to resolve the issues and communicating the information. To achieve the above in a timely and cost effective approach, MACTEC approaches each and every project with a team concept in mind—the team being our in-house staff, sub-consultants (if any), our client's staff, permitting agencies and other stakeholders affected by the project.

MACTEC believes the following elements are keys to the successful design of any project:

1. A complete understanding of what is to be accomplished by the construction of the project.
2. A mutual understanding between MACTEC and our client as to the work scope and plan content.
3. Full knowledge of permitting issues and agencies.
4. Compliance with design and safety standards.
5. Consideration of the constructability of the project.
6. Awareness of the time frame for design, including permitting and preparation of plans and specifications.
7. Adherence to construction budget constraints.
8. Public involvement and input.

With these issues in mind and the desire to address them MACTEC will adhere to the following general outline in the development of plans for a County project assigned to us under this Contract. It should be noted that the degree to which each element of this general outline is addressed will be dependent on the actual scope of work tasked by the County. Presented below is a description of MACTEC's general approach to an engineering design project:

**STEP 1- Project Initiation**

- Establish communication procedures. Frequent and clear communication is critical to the development of plans that best meet the objectives of the County.
- Understand County's preferences for management to include updates, reports, and meetings.
- Use an integrated team approach.
- Input by all stakeholders on technical issues and project management issues. Include public input when appropriate.
- Develop understanding of the County's plans and priorities for the specific project to include such things as short-term and long-term development plans, accommodate future expansion and storm survivability.
- Early identification of less obvious issues like light pollution control, permit requirements.
- Establish basic design goals. Combined with MACTEC's knowledge of the regulatory requirements and MACTEC's design and construction experience, these goals will be developed into a superior plan that's both constructable and cost effective.

This phase of the design typically occurs in the first few weeks of the project, but communications will continue throughout the project.

**Preliminary Engineering.** As needed, MACTEC will provide preliminary engineering services which could include such things as preliminary geotechnical investigations, control, boundary and alignment surveys, wetland delineation, endangered species surveys, cultural resource surveys, typical section development and

preliminary drainage and permitting. This phase of the design process is typically conducted by in-house MACTEC staff.

**STEP 2 – Collect Data Relevant to Project Scope Such As:**

- Studies and Traffic Counts
- Survey and Wetlands Delineation
- Site Review and Determination of Existing Drainage Patterns
- Interviews with Pertinent Individuals, Public and Private

**STEP 3 – Develop Preliminary Plans**

- Plot Survey Data
- Obtain a Soils Investigation Report
- Develop Typical Sections and lay out Preliminary Plan
- Identify Design Challenges and Utility Issues
- Permittability review with Permitting and Review Agencies
- Brainstorm and Identify Best Solutions

Once MACTEC has reviewed all existing data and performed preliminary layout and analysis of the project a Design Issues meeting with the County staff will be scheduled. The outcome of this meeting would effectively guide the design, at which point an actual plans review by County staff could be scheduled. We believe this approach would provide County staff with a more meaningful set of plans for review and would also help to foster the team atmosphere throughout subsequent phases of design. Following this, MACTEC would proceed to the 60% 90% and 100% reviews normally scheduled, thus saving the valuable time of County staff.

**STEP 4 – Refine Preliminary Plans**

- Implement Best Ideas Gained from Brainstorming Process
- Implement Requirements of Permitting and Review Agencies
- Coordinate with Utility Companies and Incorporate Adjustments
- Develop Drainage/Stormwater Design and Finalize Plan Based on above
- Develop Preliminary Cost Estimate
- Submit Permit Packages Early
- Submit Engineer's Report to Support Design Recommendations

Submit the plans and specifications to the County staff for reviews. Meet with the Staff to identify and discuss any deficiencies

**STEP 5 – Develop Final Plans**

- Incorporate Permit Agency Comments and Develop Details Required to Construct Project
- Develop Quantities and Final Cost Estimates
- Complete Construction Plans Package and Specifications. MACTEC will prepare preliminary and final design construction drawings for submittal to the County. These construction documents shall include the following as necessary
- Cover sheet, General Notes, and Legend Sheet
- Existing Conditions
- Site Demolition Plan
- Site Layout Plan
- Erosion and Sediment Control Plans
- Grading, Drainage, and Utility Plans
- Site Details Plan

- Hydrology Study, if required
- Landscape Plan
- Construction Details
- Specifications

Submit the plans and specifications for the County Staff for reviews. Meet with the Staff to identify and discuss any deficiencies.

*Reviews.* Maintaining close coordination with the County Project Manager will be essential to the successful completion of any project . At various stages of plans, as determined by agreement with the County's Project Manager, MACTEC will submit our plans for review and comment. This is traditionally done at the 30%, 60%, 90%, and 100% stages. However, based on our experience on smaller projects where an abbreviated or minimal plan set is desired, the County may wish to consider an alternative review schedule.

*Schedules.* The time required to complete a project is dictated by the scope of the project and public and agency review requirements. MACTEC has the in-house resources to complete all phases of the project in a timely manner consistent with the originally negotiated project schedule. We also have the expertise and experience to help move the project through the various regulatory mazes and public involvement requirements to help the County meet its program goals and objectives in a timely and cost effective manner. MACTEC staff is committed to meeting all project schedules!

*Permitting:* The engineering and construction documents will be submitted to local governing authorities for their review towards obtaining required permits. MACTEC's services include submittal to the proper authorities, tracking the progress of review and responding to review comments. MACTEC maintains excellent working relationships with the US Army Corp, Northwest Florida Water Management District and FDEP.

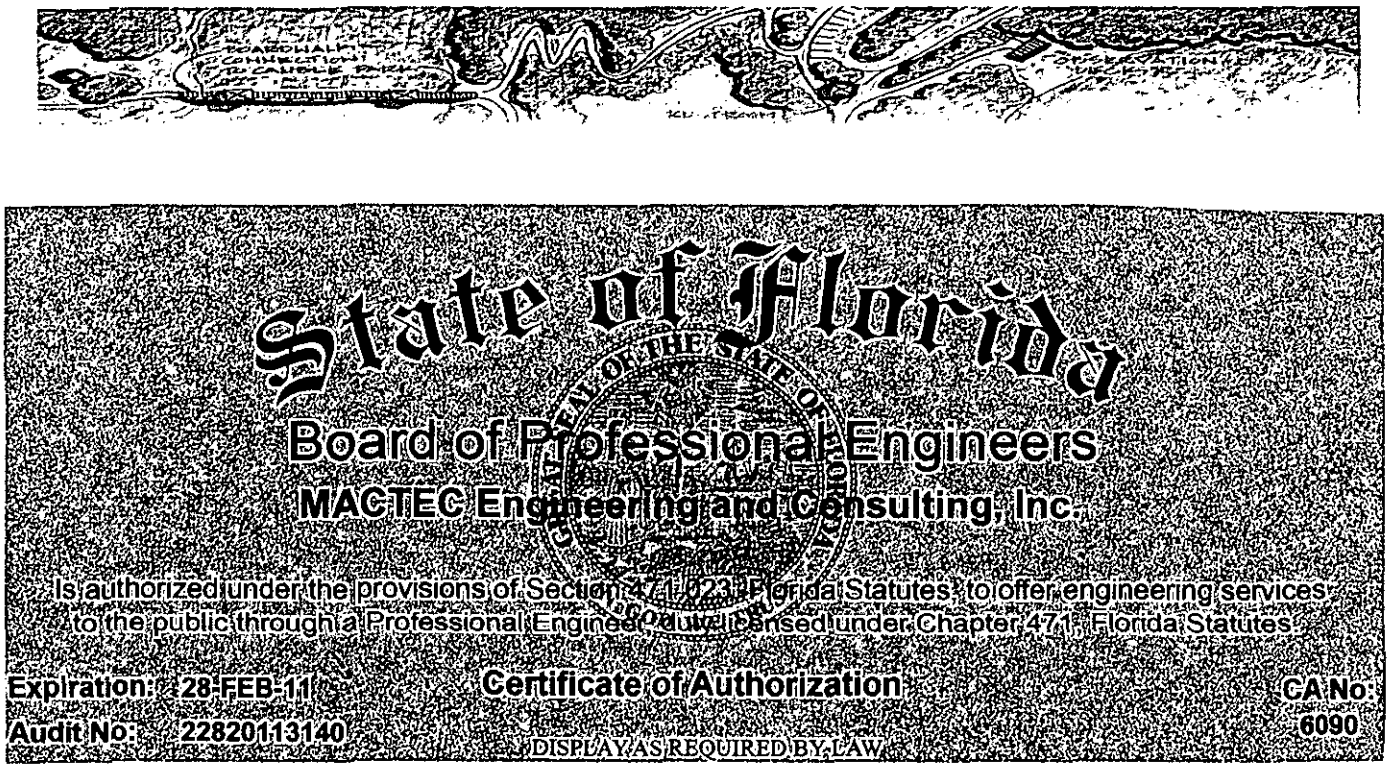
**STEP 6- Construction Management**

Communication with construction bidders and sub-contractors is critical to maintaining budget and schedule. MACTEC routinely provides construction management services and knows the current conditions of the construction market. This allows MACTEC to foresee and minimize a lot of potential snags in the bidding process. If issues should arise, MACTEC can effectively represent the County's interests and quickly clarify the bid requirements. All services can be provided in-house. These optional services could include:

- construction management
- geotechnical testing
- materials testing labs

**Summary**

In summary, MACTEC's project team will draw on its wealth of similar project experience to tailor our approach to meet the specific needs (scope, schedule and budget) of any project assigned to us under this contract. We will address all of the issues affecting the successful design and development of the park/recreational facility, and we will seek to implement cost-effective design and construction solutions. The staff of MACTEC is genuinely excited about providing park and recreational facility engineering services for Leon County.




*State of Florida Professional Engineers*
*MACTEC Engineering and Consulting, Inc.*

# State of Florida

## Department of State

I certify from the records of this office that MACTEC ENGINEERING AND CONSULTING, INC. is a corporation organized under the laws of Delaware, authorized to transact business in the State of Florida, qualified on April 18, 1991.

The document number of this corporation is P33646.

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 9, 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: 100193773801-021911-P33646

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 Business Charter*
***MACTEC Engineering and Consulting, Inc.***

*Expiration – February 9, 2011*

MACTEC