



TAB 3  
Proposed Solution

## Project Approach

CivilSurv uses a proactive and comprehensive approach toward the management of its projects. This approach is based on the selection of the organizational structure best suited to meet the requirements and needs of each specific project. This allows us to match the technical and administrative needs of our clients with the skills, talents, and experience of a team specially selected for the project.

As a firm that routinely handles several **Continuous Consulting Services** contracts, our organizational structure lends itself to providing design and planning services for multiple projects of various sizes in short timeframes. The **CivilSurv Team** recognizes that its strong credentials, resources, and ability to respond quickly and efficiently are not sufficient in and of themselves to guarantee successful performance on this contract. The contract requires a management plan designed to specifically address the **staffing, monitoring, planning, and communications** problems inherent in open-ended contracts. It also calls for a management plan that deals with the need for well-documented and understandable procedures so that staff can be efficiently managed. Specifically, our management plan will provide:

- An efficient management system with clearly defined roles and responsibilities for scope, schedule, and budget;
- A Contract Manager as the primary point-of-contact for the County;
- Quick-turnaround capability, as well as long-term program continuity;
- Compliance with Work Order schedules and budgets;
- Flexibility to respond to changes in scope and direction; and
- Quality assurance and quality control throughout phases of the project

As Contract Manager, Craig R. Fuller, PE is responsible for ensuring the availability of human resources to provide high-quality services, maintain assignment schedules, control costs, perform job cost accounting, and to develop effective and responsive channels of communication with and between the County and the Team.

For each assignment, Mr. Fuller will: 1) Identify the County's overall project objective and develop a thorough understanding of the scope; 2) Build project advocacy with the Team by holding internal project meetings to ensure that Team members understand the scope, budget, and schedule requirements; 3) Initiate project documentation procedures, job cost accounting, and project schedule tracking; 4) Coordinate regularly with each Team Leader and the County regarding the status of each assigned task; 5) Implement QA/QC reviews; 6) Submit quality deliverables on time and within budget. Mr. Fuller will maintain a constant direct line of communication with the County's representative and will supply written status reports on regular agreed upon basis.

Mr. Fuller will be the designated point of contact and will handle all coordination with our technical staff, quality control staff, subconsultants, other governmental agencies, utility companies, and permitting agencies. Communication should and will flow freely between all parties involved; however, our contract manager will be kept informed of all communications via email, telephone, minutes of meetings, etc. and will be responsible in keeping a well-updated and organized project file.

## Project Management

CivilSurv Design Group's Project Management System starts with the development of a well-prepared project scope which is properly staffed and budgeted. Staffing availability is compared with the project budget and schedule during the preparation of the project staffing plan in order to ensure that no team members are over-committed, which could lead to project delays. Once a good scope is used to develop a good schedule and qualified professionals are selected with the resources necessary to meet that schedule, the rest comes down to good communication and project management skills.



Communication and coordination are the primary keys to success of any design assignment. Strong project management ensures that a quality product will be produced, that the work product is delivered on or ahead of schedule, and that the lines of communication are open.

It has been our experience in managing both municipal and FDOT projects that providing a single point of contact for the County's project manager is extremely helpful in simplifying and reducing their already busy schedule. Craig Fuller will ensure that communication is maintained throughout the course of this contract. He will be the designated point of contact and handle all coordination with our technical staff, quality control staff, sub-consultants, other governmental agencies, utility companies, and permitting agencies.

As soon as a task order is executed, we will develop a project management plan that will include the project schedule, team member assignments and responsibilities, list of contact names and telephone numbers, procedures for documentation of contacts, correspondence, calculations/analysis procedures, Q/A, etc. CivilSurv Design Group's communications procedures are listed below.

The County project manager will be kept fully aware of every issue that could impact the project. This information will be compiled and chronicled in a monthly project status report. Our team will coordinate all contacts with outside agencies as authorized by the County's project manager.

To maintain control of the project, communication between the CivilSurv team and the County will be primarily through our Contract Manager. Documentation of discussions will be made and distributed to the CivilSurv team and the County's project manager. We will document all contact with outside parties, whether conducted by CivilSurv Design Group or its sub-consultants.

CivilSurv Design Group will maintain proper communication between the members of the consultant team and ensure that the proper information is provided to those who make decisions. The following procedures will be implemented to ensure the effective flow of information:

- The CivilSurv project manager will conduct an internal kick-off meeting with all parties assigned to the project. This meeting will ensure that all individuals are aware of their responsibilities within the scope of the project, and everyone understands and accepts the requirements of the project schedule.
- CivilSurv will conduct progress meetings on a regular basis to review the status of each activity and quality of the product.
- CivilSurv will conduct meetings with the County technical staff to review decisions prior to scheduled submittals.
- Our team will schedule formal design reviews with the County's project manager to provide the County with a complete understanding of the decision-making process.
- CivilSurv will prepare minutes of each meeting and forward them to the County's project manager within 5 days of the meeting. Upon approval, all members of the team will receive copies.

As a Principal of CivilSurv, our Contract Manager has the authority to commit the required resources to any task assigned to our Team by the County. Our overall management approach and individual project approach will ensure the delivery of these tasks on-time and within budget.

## Cost Control

The cost management policies and procedures that we utilize at CivilSurv are designed to ensure that our projects are always completed within the approved budget. Internal budgetary problems are avoided by clearly establishing the cost and scope of the work at the start of the project and by anticipating and budgeting for unforeseen contingencies. Close communications will also contribute to the prevention of cost overruns.



In order to provide an efficient design for the construction and the life of the project, our team will present design alternatives to Lake County staff, including the maintenance managers, during progress meetings. These alternatives will be reviewed for long- and short-range cost savings, maintenance capabilities, life-cycle cost, durability, and reduced impacts to the environment. At each step of the plan's development, we will submit our Opinion of Construction Costs, which will be developed by comparing the current and historic bid prices of our other projects, reviewing available public construction pricing, and consulting with local contractors and manufacturers.

We provide cost estimates for our projects to ensure they are within budget. We are able to review with County staff the cost of options and alternatives during the design phase. Additionally, we will provide preliminary life cycle cost analysis, if requested for design elements. Careful analysis with Lake County's staff will result in a refined Opinion of Construction Costs.

### Quality Assurance/Quality Control Plan

Our organizational chart illustrates the responsibilities of the personnel to be assigned to the project, along with the reporting relationships among them. Our high standards are maintained through a practical and effective Project Management Program. The QA/QC program's objective is to provide engineering products based on sound principles and practices reflecting the highest standards to ensure that work products conform to the scope and project documents and is void of errors and omissions. The program is founded on the following four key principles:

**Proper Project Approach:** Quality is achieved by adequate planning, coordination, supervision, and technical direction; proper definition of job requirements and procedures; the use of appropriately skilled personnel; and by individuals performing work functions carefully and doing it right the first time.

**Constant Project Supervision:** Quality is controlled through daily checking, reviewing, and surveillance of the entire team's work activities by designated Supervisors and Managers.

**Formal Quality Reviews:** Quality is verified by having a manager or designee performing QC functions consisting of surveillance and auditing of the work and the procedures followed when performing the work.

**Active Senior Management Oversight:** Quality is assured through independent reviews by qualified staff of the processes, procedures, documentation, supervision, technical directions, and staffing associated with the project development.

CivilSurv Design Group, Inc. provides a diverse array of services which entail the production of a multitude of products. All work products and processes are to be reviewed under the QA/QC program, including Contract Documents, Technical Specifications, Design Constructability Reviews, Field Reconnaissance, Final Drawings and Reports, Permit Documents, and Project Close-Out.

The Project Management Plan defines the work products requiring QC reviews and the schedule for performing the QC reviews. Generally, QC review should be performed on each work product before it is used for further project development and before a required phase submittal to the client. Procedures outlined herein are purposefully general to afford sufficient flexibility so they can be applied to the wide range of deliverable documents furnished to clients, as well as be tailored to suit the particular needs of various Regulatory Agencies.

The QC Reviewer shall be provided a complete package of background information with the work product. This QC review package should typically include the work product to be reviewed, the project scope, client directives/changes, project criteria, technical standards/codes/regulations, computations, alternatives analysis and selected alternative justification, and previous review comments.

To ensure quality final products, daily QC measures shall be implemented. All design drawings and worksheets will be reviewed on a line-by-line basis. Where appropriate, all printed and written documents will be on formatted sheets approved by the Client. The text and calculations will be presented in orderly and consecutive steps with headings. Solutions



and results will be double-underlined and/or boxed. All work will be within the margins of the paper. A satisfactory set of calculations will readily communicate: (1) the problem under consideration, (2) the solution basis, and (3) the answers, checks, and conclusions (if applicable).

All documents will be completely filled out including the job title and number, sheet numbers, and the initials of the employee. Each sheet will be titled at the top of the page with the particular subject or area of consideration. All calculations and design assumptions will be checked by another individual who did not perform the initial work. Upon completing this check, the individual will place his/her initials in the title block on each individual sheet. If this procedure is followed in the layout of calculations, the checking and revision procedures become greatly streamlined. This will increase productivity and reduce the number of mistakes, thereby leading to greater quality control.

Likewise, drawings will be checked on a line-by-line basis. Check prints will be formalized through the following process: On the prints, each participant in the checking process will be shown, indicating that the checking process is being performed. During the process of creating a final drawing, 'check prints' are required at different stages for notation of changes and additions. The notations of changes and additions will be marked on the check print in **RED**. As the notations on the print are drafted, the Employee will mark through each item on the print with a **YELLOW** highlighter. As the Employee is marking off the completed items, he or she will take this opportunity to check their work. Once all of the items marked with **RED** on the check print have been **YELLOWED** through, the employee will make a new plot and run a new check print.

Both the new check print and the 'old' check print will be returned to the person who will do the checking. If **RED** items on the 'old' print have not been highlighted with **YELLOW**, the prints will be returned without being checked. Checking will not begin until all **RED** lined items have been **YELLOWED** or, if there is a problem, at least so noted.

When checking begins, the checker will highlight the **YELLOWED** items on the 'old' print with a **GREEN** marker to indicate correct completion. If an item was incorrectly completed, it will be circled in **GREEN** on the 'old' print. If circling is required, the checker will return the 'old' print to THE SAME EMPLOYEE for correct completion. If circled items are not extensive, there will be no need for another check print. These items will be checked by comparison to the original CADD plot. The new check print is preserved for further mark-ups. Use of the **RED** - **YELLOW** - **GREEN** method described will save time in checking and give our production personnel the opportunity to learn from possible mistakes.

The culmination of the production process prior to any phase submittal will include at least one independent review. This review will be performed prior to submittal and will be made by a senior level Professional not directly involved in the day-to-day project production. All relevant comments/recommendations will be added to the products prior to the phase submittal.

In addition to the project-specific reviews, our entire work processes and procedures are to be continually reviewed and supervised. This Quality Assurance program consists of reviews of project documents at various stages by the Project Principal-in-Charge to ensure that the project team's services are being rendered in strict conformance to the Quality Control Program. The depth of the QA reviews will be sufficient to assure the project staffing is adequate in both quality and quantity and that proper direction has been provided. The QA reviews will assure that the team is complying with requirements and that the project documents reflect that compliance. Written reports will be compiled from each review and will obtain findings and resolutions.

The level of peer reviews will vary based on project complexity, importance, innovative requirements, potential liability exposure, or other similar "sensitive" characteristics.

Through these elements, CivilSurv Design Group can guarantee prompt, professional service on engineering projects of varying magnitudes and complexity. By emphasizing safety, technical training, and professional registration, we instill in all of our staff the pride in their work that we believe is the key to competency and motivation.

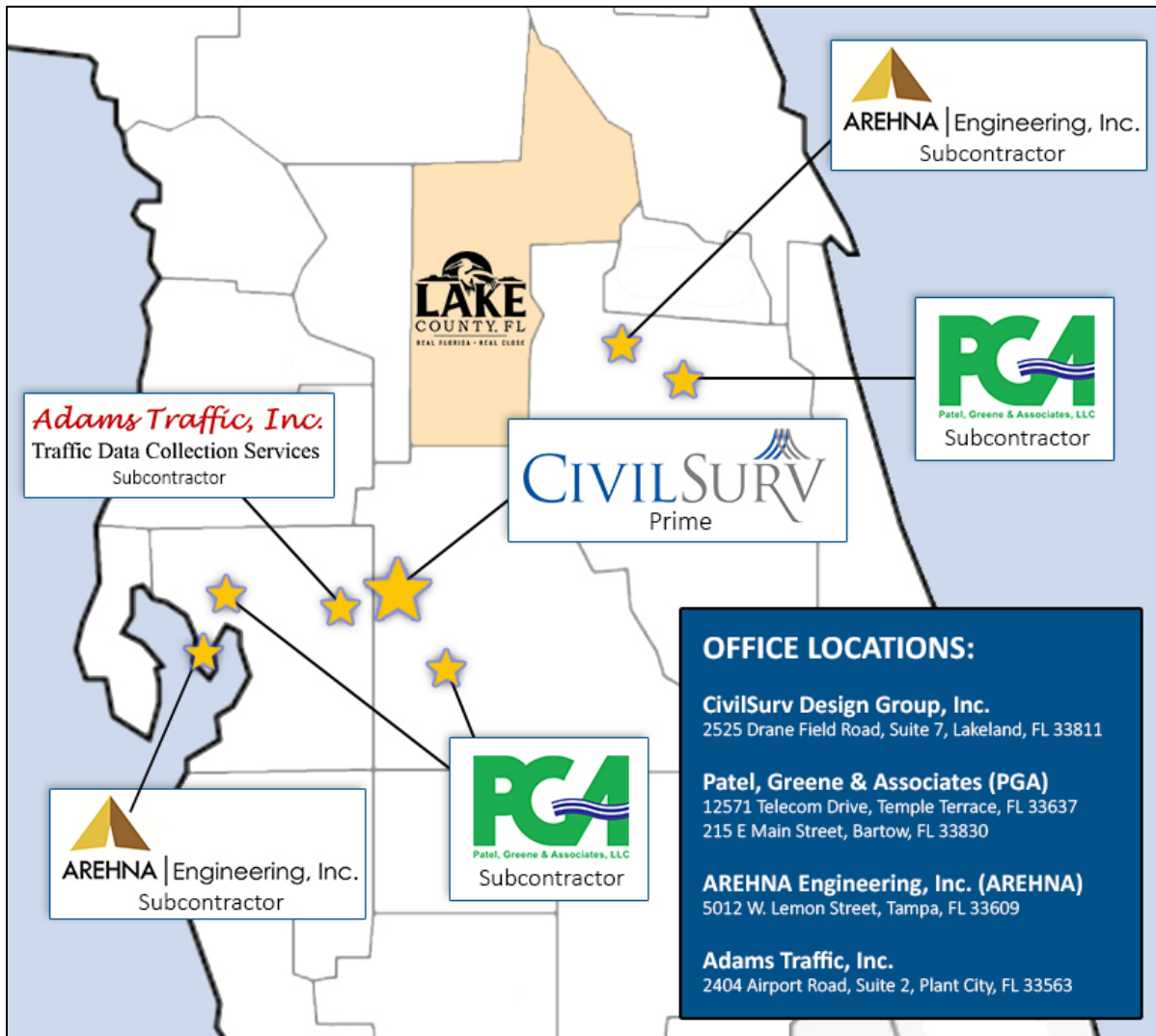


## Additional Resources and Capabilities

The **CivilSurv Team** is distinctively qualified to serve Lake County. Unlike most multidisciplinary firms, our business focus is on local government services, thus we can serve the County without the interest conflicts that might arise if we were also serving the area’s developers. This focus has allowed us to have successful long-term relationships with numerous City, County, and State Agencies throughout the State of Florida.

CivilSurv prides itself on the ability to produce a qualified project team at a moment’s notice. This ability is provided first and foremost due to the extensive and diverse background of our proposed team.

Lake County and the surrounding communities are our area of focus. We know the people, the projects, infrastructure, culture, politics, and the budgets. This is our home as well and we have a vested interest in the success of our local communities. We have close working relationships with local cities, Regional Planning Council, the Southwest Florida / St. Johns River Water Management District, Florida Department of Environmental Protection, and Florida Department of Transportation.



As demonstrated with the office locations, the CivilSurv Team surrounds Lake County and regularly works within it. CivilSurv is specifically an Engineer for the City of Tavares and is on teams serving the City of Groveland for large programs. We have experience reviewing many proposed projects with the team submitted, and have recently completed projects for Lake County.

### **Economic Impact:**

The CivilSurv Team's investigation of innovative, local construction techniques, accelerating the project design schedule, increasing safety, reducing environmental impacts, reducing impact to the stakeholders, and minimizing long-term maintenance will provide Okeechobee County with several important, direct economic benefits, as follows:

#### **- Local Teams**

We are firmly committed to maximizing the expenditure of County funds to LOCAL TAX-PAYERS.

#### **- Support Local Contractors**

Our design will consider the **capabilities and preferences of local contractors** to best enable County contractors to successfully bid the projects, utilize local manufacturers, subcontractors, and suppliers. This not only provides greater quality control of the finished product, but effectively **re-channels County project funds directly back into the County**.

#### **- Top-Down Construction**

Evaluate methods of construction which eliminate detrimental construction activities, improving safety and minimizing environmental and other impacts. Confine construction to a limited area, reducing impacts to project stakeholders.

#### **- Accelerated Project Design**

The depth of resources of our in-house design Team's direct experience with condensed-schedule projects will minimize the duration that the project is under design and gets the project "out on the street" as quickly as possible, thereby **stimulating the County's economy** as quickly as possible.

Our Team's familiarity with the complex permitting requirements unique to this type of contract will be an invaluable asset to minimizing design phase durations and cost.

