

**PROFESSIONAL SERVICES FOR
SMART INFRASTRUCTURE GIS DEVELOPMENT SOLUTIONS
PROJECT FACT SHEET**

The University of Central Florida has a need for firm(s) to provide specialized professional services related to GIS Development Solutions for Smart Infrastructure. Primary GIS service targets are systems integration, development, design, support, and general consultation, with a primary focus on integration and development. Firms must have experience with integration of common utility industry systems (OMS, AMI, DER, ADMS, CMMS/WMS, EMS, etc.) and demonstrate at least 10 years of experience and working solutions within this industry. These consulting services may be requested for any type of project provided that the total consulting fee for any individual project is \$500,000 or less.

Firms must be familiar with and have experience with the following key areas:

- Utility Networked GIS design, Workflows, and Distribution Modeling
- ESRI/ArcGIS Localized Development Solutions vs Specialized App Development
- Real-Time Data Integration of customer AMI System (Itron Gen5/Riva) for outage mapping, live maps, sensor data visualization
 - Real time dynamic utility symbol/color changes based on service type, service status and events reported by various systems (example: outage notifications, phase loss, overloading, multi-fed circuits, looped/radial systems, and historical log/tracking of outages, outage requests, durations, and events).
- Development of Interactive Dashboards, Maps, Widgets, with Historical Event Playback and utility metrics
- Development of real-time distribution system related KPI visualizations.
- 2D/3D Mapping of Utility Systems and Campus Facilities (Buildings, Site Infrastructure, etc.)
- Utility System mapping for Electric, Chilled Water, Heating Hot Water, Natural Gas, Potable Water, Sewer/Wastewater, Reclaim Water, Stormwater, Telecomm, Street/Parking Lot Lighting Assets
- Recordkeeping and connection of As-Built Drawings and Historical Versioning
- SaaS Services Options & Software Support
- Predictive Analytics and Real-Time System Load and Flow Visualization
- On site Field Work and Validation Support

Firms must have experience with end-to-end project management solutions. Firms will serve as integration experts, technical consultants, and close advisors on an as needed basis. This represents ongoing work for campus utility and facility GIS solutions and advancements of university smart infrastructure.

Typical projects may include, but are not limited to, utility network development, systems integration, systems development of interactive dashboards and customer focused solutions, technical consultation, systems planning, network modeling, predictive modeling, and general GIS development needs across the utilities and facilities portfolio. ALL Project work will need to

ensure the safety of faculty, staff, and students. Projects may be located on the University of Central Florida main campus or branch campuses.

Exhibit A - Potential Scope of Work for Smart Infrastructure GIS Development Solutions.

INSTRUCTIONS:

The University of Central Florida wishes to enter into an open-ended contract with multiple companies for a period of one year, with an option to renew for four additional one-year periods. The University has the right to amend the terms of the contract at each annual renewal.

The selected professional will provide design, construction documents, and construction administration for the referenced services for the project. Blanket professional liability insurance for the Architect/Engineer will be required for this project in the amount of \$2,000,000 and will be provided as a part of Basic Services.

NOTE: The Selection Committee may reject all proposals and stop the selection process at any time. The University also reserves the right to cancel the project at any time.

Carefully review the Contract posted with this advertisement at www.fp.ucf.edu. Submitting a proposal for this project constitutes complete agreement with, and acceptance of, the terms and conditions contained within these documents. NO changes will be accepted.

Firms desiring to apply shall submit only electronic submissions, to be uploaded at: <https://ucf.bonfirehub.com/opportunities/106664>, comprising:

- A. a letter of interest;
- B. a completed PQS form;
- C. a copy of the current Professional Registration Certificates from the appropriate governing board. Applicants must be properly registered at the time of application to practice its profession in the State of Florida. If the applicant is a corporation, it must be chartered by the Florida Department of State to operate in Florida;
- D. a list of completed jobs over the last three (3) years, with contract value, contact name, and telephone number of the client; and
- E. narratives to address items listed in the Selection Criteria, as listed below.

Please note that only ONE (1) file can be uploaded for the entire project submission.

Pages must be numbered consecutively. Proposals must not exceed 40 (excludes cover page and tabs). Points will be deducted for proposals exceeding the 40-page limit.

Detailed submissions instructions can be downloaded from the link shown above.

Applications that do not comply with all instructions may be disqualified.

Application materials will not be returned.

No oral communications shall be binding as a change to the Advertisement or Project Fact Sheet. Interpretation of the wording of this Project Fact Sheet shall be solely that of UCF and that interpretation shall be final. UCF may respond to questions deemed by the University to be material in nature.

It shall remain the responsibility of the firms participating in this solicitation to check the website regarding any addendums and Notice of Change.

As required by University of Central Florida Regulation 7.102.22, a contractor may not submit a proposal for this project if it is on the convicted vendor list for a public entity crime committed within the past thirty-six (36) months. The selected contractor must warrant that it will neither utilize the services of, nor contract with, any supplier, subcontractor, or contractor in excess of \$15,000.00 in connection with this project for a period of thirty-six (36) months from the date of their being placed on the convicted vendor list.

SELECTION CRITERIA

Proposals are to be organized using numerical divisions shown below. Firms will be evaluated on the following:

1. **Past Performance.** Provide information on five (5) projects that are similar in-service requests and scope to what may be performed under the contract with UCF. Clearly articulate within each of the 5 projects information regarding: For each of the projects, describe what was done, list members of the team who will also be on the UCF job, and reflect the initial and final cost, the initial and final schedule, the owner's contact information, and the dates completed.
 - a. similarity in size and complexity;
 - b. initially scheduled design completion dates and actual design completion dates; provide month/day/year for each date
 - c. original budget, final budget, and reasons for any differences
 - d. owner's contact information;
 - e. names of proposed team members who worked on each project and roles that the proposed team members played; and
 - f. 2 representative images of the project

2. Ability to Take on Additional Work.

- a. Describe your current workload and staffing.

3. Experience and Ability. Describe your firm's experience and ability with the following:

- a. Utility Networked GIS design, Workflows, and Distribution Modeling
- b. ESRI/ArcGIS Localized Development Solutions vs Specialized App Development
- c. Real-Time Data Integration of customer AMI System (Itron Gen5/Riva) for outage mapping and live data visualization
- d. Development of Interactive Dashboards, Maps, Widgets, with Historical Event Playback and utility metrics
- e. Development of real-time distribution system related KPI visualizations.
- f. 3D Mapping of Utility Systems and Campus Facilities
- g. Utility System mapping for Electric, Chilled Water, Heating Hot Water, Natural Gas, Potable Water, Sewer/Wastewater, Reclaim Water, stormwater, Telecomm, Street/Parking Lot Lighting Assets
- h. Recordkeeping and connection of As-Built Drawings and Historical Versioning
- i. SaaS Services Options & Software Support
- j. Predictive Analytics and Real-Time System Load and Flow Visualization
- k. On site Field Work and Validation Support

4. Personnel. Provide bios for the following:

- a) Project Executive
- b) Project Manager
- c) Service Manager
- d) Engineer
- e) Consultant
- f) Other (GIS Manager/Analyst/Developer)

5. References. Provide up to three (3) professional reference letters from the five (5) completed projects listed in section 2. Reference letters should describe your performance on the projects. References may not be from UCF.

6. Location. Provide the address of your main office, any regional/local offices, and details of what services and personnel you have at each location.

7. Safety and Security. Describe your policies, planning, and practices related to jobsite safety and security. Note: Criminal background checks, and E-verification must be provided by the professional for all employees and consultants. Picture ID cards will be worn at all times workers are on the jobsite.

8. QA/QC. Describe your firm's approach to Quality Assurance/Quality Control. Describe all procedures that you have in place to ensure that design drawings and specifications

fully document all code and UCF requirements on the first review submittal. Describe your approach for resolving project issues caused by lack of adequate scope detail, design errors, or design omissions.

9. **SDVOSB and MWBE.** Describe how your firm employs and uses Service Disabled Veteran-Owned Small Business (SDVOSB) and Minority and Women-Owned Business Enterprise (MWBE) and whether your firm is certified and by what agency.

10. Conflict Avoidance and Resolution.

- a) Describe your firm's practices to avoid and resolve conflict.
- b) Describe three (3) occasions when conflict occurred on a project related to your project scope or services that was caused by your design errors/omissions, how the issue was resolved, if you took financial accountability for the issue, and what policies/procedures you put in place to avoid future similar errors/omissions.

11. Job-specific Qualifications.

- a) Experience working with SCADA and/or various other historian systems for combined visualizations
- b) Experience working with utility industry systems, live data requirements, GIS buildout maps, and integrations (including but not limited to OMS, DER, ADMS, CMMS, etc)
- c) Experience with project integration solutions for Itron Gen5/Riva AMI

GENERAL INFORMATION

1. All applicants will be notified of the results of the short-listing in writing. Finalists will be informed of interview dates and times, and finalists will be provided with additional information, if applicable.
2. The Selection Committee will make a recommendation to the University President. All finalists will be notified in writing of the President's action.

Exhibit A:

Potential Scope of Work for Smart Infrastructure GIS Development Solutions.

Professional Services for Smart Infrastructure GIS Development, Integration, and Technical Support Solutions for utilities and facilities infrastructure.

Examples of some of the services that may be used more frequently than others. These are all potential projects or technical evaluations that we are seeking to undertake at the main campus or related branch campus locations throughout central Florida with no immediate timeline available:

- Utility/Distribution Level Operational Dashboards/KPI's
- Real-Time AMI Data Integration and Visualization of Outages, Events, Operational Status and Visualization
- Updating/Upgrading GIS to Networked solution with potential for distribution modeling
- As-Built Records/Drawing Data Historian with Versioned Updates
- 2D/3D Utility Infrastructure Model Buildout/Advancement
- Interactive Dashboards/Maps for Predictive Modeling and Operational Scenarios
- Integration to CMMS/WMS for Work Order links and statistics by site