

**CITY OF MARATHON, FLORIDA
RESOLUTION 2019-117**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, APPROVING A WORK AUTHORIZATION FOR PROFESSIONAL SERVICES FOR THE DEVELOPMENT OF THE “MARATHON UTILITY INFORMATION SYSTEM” BY RAFTELIS FINANCIAL CONSULTANTS, INC. IN AN AMOUNT NOT TO EXCEED \$249,060.00; AUTHORIZING THE CITY MANAGER TO EXECUTE THE PROFESSIONAL SERVICES AGREEMENT ON BEHALF OF THE CITY AND EXPEND BUDGETED FUNDS; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, pursuant to Resolution 2019-87 adopted on September 10, 2019 by the City Council of the City of Marathon, Florida (the “City”), which approved a three (3) year term professional services agreement with Raftelis Financial Consultants, Inc. (“Raftelis”) for the preparation of Annual Utility Financial Analysis and Related Services (the “Professional Services Agreement”) in an annual amount not to exceed \$50,000 with a term extension of up to two (2) years, and

WHEREAS, the City wishes to approve a work authorization for the development and implementation of the “Marathon Utility Information System” by Raftelis Financial Consultants, Inc. (“Raftelis”) in an amount not to exceed \$249,060 as described in the proposal dated November 4, 2019, hereto attached as Exhibit A,

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THAT:

Section 1. The above recitals are true and correct and are incorporated herein by this reference.

Section 2. The City Council finds that the Professional Services Agreement between the City and Raftelis, for the development and implementation of the “Marathon Utility Information System” meets the City’s purchasing policies and procedures because of the existing professional services agreement.

Section 3. The City Manager is authorized to execute the work authorization between the City and Raftelis, in substantially the same form and format as attached hereto as Exhibit “A,” on behalf of the City and expend budgeted funds.

Section 4. This resolution shall take effect immediately upon its adoption.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THIS 10TH DAY OF DECEMBER, 2019.

THE CITY OF MARATHON, FLORIDA



Steven Cook, Mayor

AYES: Bartus, Gonzalez, Senmartin, Zieg, Cook
NOES: None
ABSENT: None
ABSTAIN: None

ATTEST:



Diane Clavier, City Clerk

(City Seal)

**APPROVED AS TO FORM AND LEGALITY FOR THE USE
AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:**



David Migut, City Attorney



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www.raftelis.com

November 4, 2019
Mr. Dan Saus
Utilities Director
City of Marathon
9805 Overseas Highway
Marathon, FL 33050

Subject: Marathon Utility Information System Scope

Dear Dan:

Attached is a proposal for Raftelis Financial Consultants, Inc. (Raftelis) to provide the City of Marathon (City) with a customized Utility Information System (UIS) for its wastewater and stormwater utilities. The attached scope is based on conversations with City staff including the meetings Chris McPhee and Tony Hairston held at the City on July 27, 2017 and September 18, 2019. As we have demonstrated, our understanding of the City's unique billing configuration along with our experience implementing complex parcel to meter-based billing arrangements will ensure a successful project. The Utility Information System is not licensed and will be under the City's ownership upon the completion of the project. We have included a project schedule that begins December 1st, 2019 with implementation by September 1st, 2020 with post-live support through November 30th, 2020.

We are excited to assist the City in development of the Utility Information System. Please do not hesitate to contact me with any questions that you or your staff may have regarding this proposal.

Sincerely,

RAFTELIS FINANCIAL CONSULTANTS, INC.

A handwritten signature in blue ink that reads "Tony Hairston".

Tony Hairston
Vice President

Marathon Utility Information System Scope

Introduction

The City of Marathon (City) provides its wastewater and stormwater utility customers with a variety of services for which fees are billed and collected in differing ways. Raftelis Financial Consultants, Inc. (Raftelis) has assisted the City with utility rates for its wastewater utility and financial analysis related to the stormwater system. In doing so, we understand the complexities of the City's billing arrangement including the interactions with the third-party biller. The creation of the Utility Information System (UIS) will improve customer service responsiveness and billing data quality by enabling the tracking and seamless viewing of customer accounts and transactions. The City bills and collects its wastewater fees through a third-party billing agent, Florida Keys Aqueduct Authority (FKAA). In order to ensure that the charges levied by FKAA accurately reflect those charges expected by the City, there will also need to be a regular reconciliation of customer accounts. The UIS will also need to account for both wastewater and stormwater assessment information, which is billed annually on a parcel basis. Given its experience with other utilities in similar situations, Raftelis demonstrated a tool for a similar sized utility with many of the same needs. The following scope of services details the process for developing such a tool that will meet the specific needs of the City. The project methodology described below presents a framework for system development that has been successfully applied for numerous utility solutions developed by Raftelis.

Creation of Utility Information System

Task 1. Data and Systems Review

The creation of a new utility information system should begin with a thorough review of other information supporting systems and IT infrastructure. Raftelis has some familiarity with the data made available by FKAA via monthly reporting files as well as some information about the systems used by the City's utility billing staff on a daily basis. It is recommended that a thorough review be conducted to assist with envisioning how the systems could be tied together in such a way that utility information is highly available and easily understandable through the new UIS. This task provides the opportunity to customize the application design based on data availability and how system interfaces are catalogued. This task will also contain a brief review of the other systems at the City that will need to be integrated with the UIS, such as MIS.

Task 2. Detailed Design and Requirements

Once the overall context of the utility information system has been established, Raftelis will collaborate with City staff to develop the functional and technical requirements of the new system. Raftelis anticipates that the new tool will be developed as a custom application in Visual Studio using the C# programming language and the MVC framework. This application will likely be set up to leverage the City's current SQL Server database platform and would be developed as a web application accessible only by City staff.

Beyond these anticipated technical requirements, Raftelis will develop detailed documentation on functional requirements concerning behaviors that the application should exhibit, what inputs and outputs exist for each behavior, and how each behavior will be tested. Input will be collected on what the user interface for the application should look like in the form of a user story. In this way, Raftelis and City staff can plan the workings of the application and establish functionality before development begins. Design and planning often save a great deal of effort when it comes to application development as the programmers will know what needs to be accomplished and can execute their work without the need to refactor or add unexpected functionality. Raftelis will deliver detailed functional requirements

documentation as part of this task and will expect to iterate with City staff on these requirements until all parties are satisfied with the result before beginning application development.

Task 3. Prototype Development and Review

Once the design requirements have been established, Raftelis application development staff will create a rapid prototype of the new utility information system. This prototype will primarily demonstrate the user interface design of the application and may contain some of the desired functionality needed for demonstration purposes. Raftelis staff will demonstrate the prototype to City staff and will solicit comments and suggestions on the application design. If major changes are suggested, Raftelis staff will update the prototype accordingly and will demonstrate it again, possibly via web meeting, as needed. After one or two iterations, the prototype will then represent the draft user interface of the application.

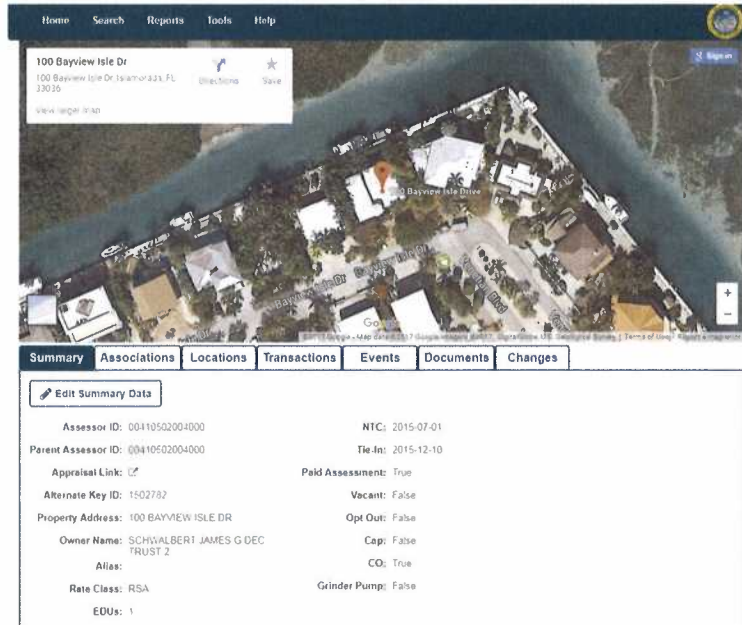


Figure 1: Example of a User Interface Prototype

Task 4. Programming and Database Development

Raftelis application development staff will continue the design and development of the new utility information tool by building upon the prototype using the functional requirements established in Task 2. Functional behaviors will be added to the application, connectivity to the City's chosen database platform will be established, and the underlying database design for the application will be developed. The newly designed database will be developed initially on Raftelis servers and then transferred to a test or development environment at the City. This database will then be populated with test data to ensure that all functionality is accessing and updating the data as expected. All functional behaviors of the tool will be

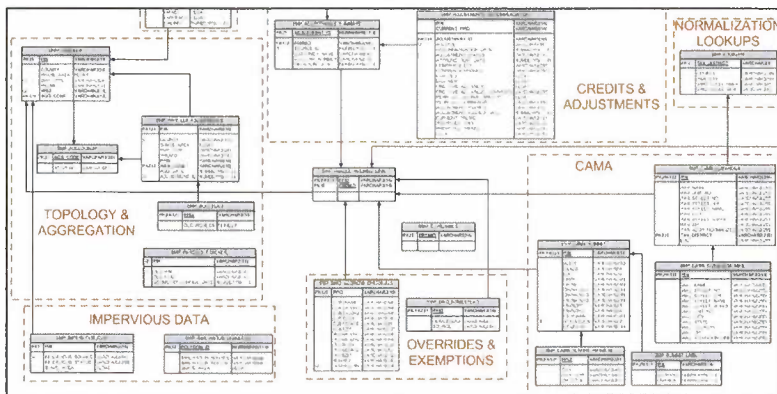


Figure 2: Example of a Database Entity Relationship Diagram

rigorously tested to ensure quality control. Raftelis staff will likely demonstrate the application via web meeting on a regular basis to ensure that stakeholders and users have an opportunity to participate in the development process. Programming and database development will continue in this way until all functional requirements have been met by the application.

Task 5. Documentation and Training

The screenshot displays a web-based application interface for property assessment. At the top, there are navigation tabs: Summary, Associations, Locations, Transactions, Events, Documents, and Changes. The 'Summary' tab is active. The interface is divided into several sections:

- Assessor Information:** Assessor ID: 00410502004000, Parent Assessor ID: 00410502004000, Appraisal Link: [icon], Alternate Key ID: 1502782, Property Address: 100 BAYVIEW ISLE DR, Owner Name: SCHWALBERT JAMES G DEC TRUST 2.
- Assessment Details:** NTC: 07/01/2015, Tie In: 12/10/2015, Paid Assessment: True, Vacant: False, Opt Out: False, Cap: False, CO: True, Grinder Pump: False.
- Rate Class and EDUs:** Rate Class: RSA, EDUs: 1.
- Notes:** A large empty text area for notes.
- Buttons:** Reset, Cancel, and Save.

Figure 4: Example of User Friendly Application Documentation

Once the utility information system is nearing completion, Raftelis staff will develop user documentation and training materials covering the use and operation of the application. These materials will include a user manual demonstrating each feature and explaining all functionality in detail, as well as training materials and scenarios. Raftelis staff will host on-site training sessions on the application and will install a version

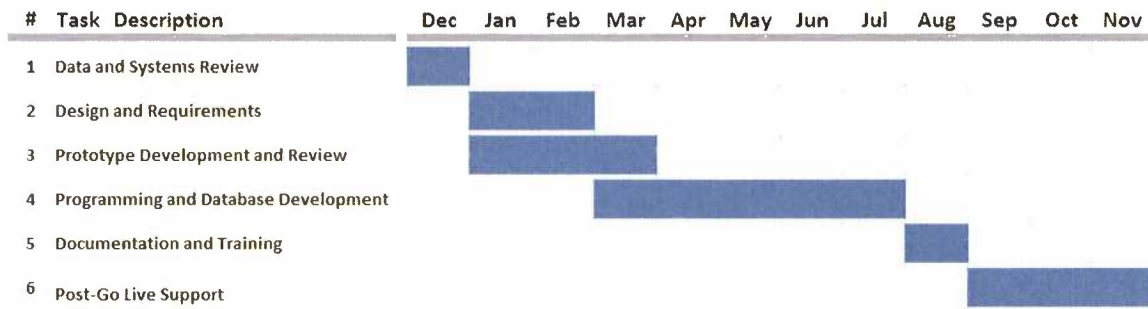
of the application that references test data so that users can try the application without altering any sensitive information. The user manual will be made accessible from inside the application so that the information will be right at hand if questions arise on how functionality works.

Task 6. Post Go-Live Support

This project will also include a period of support after application implementation is completed. Post go-live support includes access to Raftelis development staff in order to answer any questions or fix any bugs that arise after implementation. The period included under this scope will likely cover 60-90 days depending on the level of support needed. The City can then elect to establish a maintenance contract with Raftelis to provide ongoing support of the application, or Raftelis can provide the source code to the City so that City IT staff can support the application.

Project Timeline

The following represents the project timeline, assuming a notice-to-proceed date by November 15th, 2019:



Personnel

The primary Raftelis personnel for this engagement include:

Project Director: Tony Hairston
Project Manager, Lead Developer: Chris McPhee
Developers: Jesse Charette, Erin McDonald

Other Raftelis technical personnel will be utilized as necessary, and we do not anticipate the need for any sub consultants for this engagement. We have estimated between 376 and 1,260 hours of professional consulting time for the tasks enumerated herein.

Project Budget

The proposed budget for the scope of services described above is provided as 3 options:

1) Wastewater, Stormwater, Assessments, Deduct Meters, and GIS: **\$281,320**

- a. All proposed tasks and subtasks addressed. 4 onsite meetings with 2 staff members.

Cost breakdown:

# Task	295	265	210	185	1410	Task Estimate
	AH	CM	JC	EM	RT	
1 Data and Systems Review	4	4	4	4		\$3,820
2 Design and Requirements	4	32	32	32	2	\$25,120
3 Prototype Development and Review		16	16	32		\$13,520
4 Programming and Database Development						
4a Wastewater	8	36	80	100	2	\$50,020
4b Assessments	8	28	56	100		\$40,040
4c Stormwater	8	76	120	160	2	\$80,120
4d Deduct Meters	8	16	24	24		\$16,080
4e GIS Integration	4	16	16	40		\$16,180
5 Documentation and Training	8	16	8	20	2	\$14,800
6 Post-Go Live Support	6	22	28	44		\$21,620
Total	58	262	384	556	8	\$281,320

2) Wastewater, Stormwater, and Assessments: **\$249,060**

- a. Remove tasks 4d and 4e. 4 onsite meetings with 2 staff members. Cost breakdown:

# Task	295	265	210	185	1410	Task Estimate
	AH	CM	JC	EM	RT	
1 Data and Systems Review	4	4	4	4		\$3,820
2 Design and Requirements	4	32	32	32	2	\$25,120
3 Prototype Development and Review		16	16	32		\$13,520
4 Programming and Database Development						
4a Wastewater	8	36	80	100	2	\$50,020
4b Assessments	8	28	56	100		\$40,040
4c Stormwater	8	76	120	160	2	\$80,120
5 Documentation and Training	8	16	8	20	2	\$14,800
6 Post-Go Live Support	6	22	28	44		\$21,620
Total	46	230	344	492	8	\$249,060

3) Wastewater Reconciliation Only: **\$86,440**

- a. Tasks 4a, 5, and 6 are included. Other tasks not necessary, as the solution is similar to the one created for Islamorada. 2 onsite meetings with 2 staff members. Cost breakdown:

# Task	295	265	210	185	1410	Task Estimate
	AH	CM	JC	EM	RT	
4 Programming and Database Development						
4a Wastewater	8	36	80	100	2	\$50,020
5 Documentation and Training	8	16	8	20	2	\$14,800
6 Post-Go Live Support	6	22	28	44		\$21,620
Total	22	74	116	164	4	\$86,440

We propose to bill the City monthly on a percentage of completion basis.