



Town of Dundee
Scope of Services
Task Order # 6
2022 Water Audit Support
March 4, 2025



OWNER: Town of Dundee

CONSULTANT: CHA Consulting, Inc.

This Task Authorization for engineering services is made between the Town of Dundee (Town) and CHA Consulting, Inc. (Consultant). CHA is pleased to submit this proposal to provide certain professional services to the Town related to 2022 Water Audit.

This scope of services for the project identified herein, RFQ 23-01, pertains to the Master Continuing Professional Consulting Agreement for Architectural, Engineering, Planning, and Various Consulting Professional Services Between the Town of Dundee, Florida and Consultant, as modified by the Master continuing Professional Consulting Agreement for Architectural, Engineering, Planning, and Various Consulting Professional Services Between the Town of Dundee, Florida and Consultant, CHA Consulting, Inc., Contract Addendum.

A. Project Background and Description

The Town owns and operates two (2) water treatment plants (Hickory Walk and Riner) and provides potable water services to residential, commercial, and other customers within its utility service area. According to Southwest Florida Water Management District (SWFWMD) water use permit (WUP) number 20-005893, the Town is permitted to withdraw 917,500 gallons per day (gpd) and 1,202,000 gpd of groundwater from its Upper Floridan Aquifer (UFA) wells on annual average and peak month basis, respectively.

The Town is required to submit a Public Supply Annual Report (PSAR) to the district annually. The District utilizes the PSAR data from public and private potable water suppliers to support its water supply planning, water use permitting, and water conservation programs. The Town's water loss reported in Part-B of 2022 PSAR was 15%. As a result, the Town was required to (according to SWFWMD WUP Applicant's Handbook Part B Section 4.4.8) perform a water audit to identify opportunities to reduce water losses to less than 10%. The SWFWMD assisted the Town to perform a water audit and provided recommended remedial actions. The Town has requested assistance from the Consultant to review the remedial actions recommended by SWFWMD, track/document the Town's progress, and provide guidance on completion and timeline on the remaining items to complete.

B. Scope of Services

PHASE 100 – PROJECT ADMINISTRATION & MEETING

The Consultant will prepare for and attend a virtual kickoff meeting with the Town to develop a clear and mutual understanding of the scope elements and performance requirements for the Project. Specific duties under this task include contract administration, budget management, invoicing, project scheduling, and coordination with the Town staff. Invoices will include the percent complete for each task to advise and highlight the overall progress of the task, and identify completed, on-going, and pending activities.

PHASE 200 – 2022 WATER AUDIT SUPPORT

The remedial action plan recommended by SWFWMD (Town of Dundee 2022 Water Audit Report, SWFWMD, May 2024) are shown in **Table 1**.

Table 1. Town of Dundee Water Loss Remedial Action Plan Recommended by SWFWMD

Category	Action Item	No.
<i>Preliminary Loss Control Measures</i>		
Source Meter Accuracy	Conduct detailed annual field testing and calibration to assess the accuracy of the supply/interconnect meters in accordance with AWWA M6 Manual of Water Supply Practices.	1
Customer Billing System	Analyze the customer billing system to identify deficiencies in the data handling process resulting in apparent losses. Flowchart the data handling pathways to perform this analysis.	2
	Gather basic customer account demographic data, including number of meters by meter size, customer type, and consumption ranges.	3
	Implement written policies and procedures for activation of new billing accounts, zero read meters, and overall billing operations management.	4
<i>Short Term Loss Control Measures (6 months to 1 year)</i>		
Apparent Losses	Ensure the meters are properly sized. Use the compiled list of basic customer account demographics. Look for anomalies such as small meters registering large cumulative flows or large meters registering small flows.	5
	Confirm the correct meter multipliers used for large water meters and verify the absolute encoder register digits read correctly through any automatic reading equipment.	6
	Meter accuracy testing of a sample population of the customer meters with either a calibrated test bench or by bucket testing per AWWA M6.	7
	Accuracy testing of large meters (3-inch and larger) with low flow data gaps to quantify recoverable revenue consumption.	8
	Ensure all customer classes are captured in reports and that the reporting queries are capturing accurate data from the billing database.	9
Real Losses	Overnight flow monitoring for background leakage analysis.	10
	Ensure prompt response time to know leaks and main breaks.	11
<i>Long Term Loss Control Measures (1 year to 3 years)</i>		
Apparent Losses	Complete an initial third-party billing audit to confirm the validity of the systematic and reporting loss category.	12
	Conduct an account audit to verify that all customers are accounted in the billing system.	13
	Implement SOP for routine large meter accuracy testing.	14
	Confirm that credit adjustments to customer billing system do not corrupt or alter true consumption volumes. Separate billed consumption from actual consumption.	15
Real Losses	Deploy a leak detection program for proactive leak repair.	16
	Conduct reoccurring visual inspection of AMR/AMI customer meters, drain/clean meter boxes, etc.	17

For this task, the Consultant will:

- 1) Track the Town’s progress to perform the Remedial Actions 1 to 17 listed in **Table 1**, compile the supporting documentations in one package, and share the package with SWFWMD.
- 2) Develop a timed action plan (along with guidance for each item) for the Town to perform unaddressed remedial actions to date and submit documentation to SWFWMD.

C. Deliverable

The deliverable of this project is as follows:

- Remedial Measures History and Action Plan along with supporting documentation in the form of a PDF document package for sharing with SWFWMD.

D. Schedule

The schedule for this project is presented below and will commence upon receiving a Notice to Proceed (NTP) from the Town.

Description	Start	End	Duration (Days)
Phase 1 – Project Administration and Meeting	3/10/25	5/9/25	60 days
Phase 2 – 2022 Water Audit Support	3/10/25	5/9/25	60 days

E. Compensation

Compensation will be a lump sum amount of **\$9,900.72** for the services provided herein and shall be due and payable monthly. The following table shows the cost breakdown for each Phase described herein.

Phase	Lump Sum Fee
Phase 1 – Project Administration and Meeting	\$519.48
Phase 2 – 2022 Water Audit Support	\$9,381.24
Total Lump Sum Fee	\$9,900.72

F. Town’s Responsibilities

The Town staff responsibilities are as follow:

- a) Provide data required to complete the tasks as requested by the Consultant.
- b) Attend progress meetings with the Consultant as needed.
- c) Provide comments and feedback on the draft deliverable document.

G. Services Not Included

The following services are not included as part of this project:

- a) Reclaimed water system master planning.
- b) Water Use Permit modifications.
- c) Detailed design drawings or specifications.
- d) Construction phase services.
- e) Utility rate study.
- f) Grant applications.
- g) Participation in FDEP rulemaking.
- h) Wetlands and/or environmental investigations.

- i) Any services not outlined in the scope of services.

H. Assumptions

The Scope of Services and compensation arrangement outlined are based on the assumption that the Town will provide review comments on the draft deliverable document within two (2) weeks from the receipt date.

I. Approval

OWNER

Town of Dundee

CONSULTANT

CHA Consulting, Inc.

Name:

Title:

DATE: _____



Name: Weston Haggen, PE

Title: Senior Project Manager

DATE: 3-4-2025 _____