



Town of Dundee
Scope of Services
Task Order No. 3
Riner WTP Facility Improvements
December 2024



OWNER: Town of Dundee, FL

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 for design services for upgrades to the Riner WTP to facilitate receipt of potable water from the City of Winter Haven.

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 provides potable water distribution and wastewater collection services to its residential, commercial, and other customers within its utility service area. The Town owns and operates two (2) Water Treatment Plants (WTPs): 1) Hickory Walk and 2) Riner.

The Riner WTP is located southeast of US 27 and Polk County Road 542 (Dundee Road), behind the Winn-Dixie Shopping Plaza on US 27. The WTP was built over 50-years ago and consists of two (2) water supply wells, a sodium hypochlorite storage/feed system, a 250,000-gallon ground storage tank (with aerator) and a ventilated, but unconditioned equipment building with one well pump, two high-service vertical split-case centrifugal (distribution) pumps and associated electrical equipment. The building is masonry block construction, with asphalt shingle roof, two access doors and a gravel floor. The facility is equipped with a backup generator.

The Town and the City of Winter Haven have entered into an interconnect agreement, whereby the Town will receive up to 0.5 million gallons per day (MGD) of potable water from Winter Haven at the Riner WTP. This will require improvements at the Riner WTP to receive the Winter Haven supply.

The proposed upgrades to the Riner WTP include a new 250,000 ground storage tank; a third high service pump (for redundancy); and a new air-conditioned control/operations building, including restroom, electrical equipment, monitoring and controls, and a workstation; and associated site/civil work in support of the aforementioned improvements. The existing high-service pumps will remain in service in their current location, as will the chemical storage and feed system.

The new ground storage tank will serve as an additional/redundant supply source for the Town and will be constructed north of the existing ground storage tank utilizing existing Town-owned property. This area has historically been used as overflow parking for the Ridge Community Church of God. The existing security fence will be expanded to the north, encompassing the limits of the Town's property, eliminating



the overflow parking area, and serve as a perimeter fence around the new, expanded facility.

It is understood that the pipeline conveying Winter Haven supply to the Riner WTP site will be design and constructed by others.

The Town has requested assistance from CHA to support design, permitting, bidding, and construction administration for the subject improvements. A desktop blending analysis is also included to confirm compatibility of the two supplies (Winter Haven and Dundee). The specific scope of services to be provided is set forth below.

B. Scope of Services

PHASE 100 – PROJECT ADMINISTRATION & MEETINGS

Task 101 – Project Administration

This task consists of overall administration of the Project including contract and budget administration, invoicing (along with progress reports), scheduling, and coordination with the Town.

Task 102 – Project Meetings

The Consultant will prepare for and attend:

- One (1) in-person kickoff meeting and site visit with the Town to develop a clear and mutual understanding of the scope elements, performance requirements, and critical success factors for the Project. The CHA Team will review above-ground assets (pumps, piping, storage tanks, equipment building, perimeter fence, and other appurtenances), water treatment unit operations and processes to obtain data on existing equipment, utility (power, sewer, etc.) connection options for new facilities, etc.
- One (1) virtual Preliminary Design Report review meeting with the Town staff to obtain feedback prior to starting final design services.
- Two (2) virtual progress/design coordination meetings with the Town staff to obtain feedback on progressing design.

Meeting summaries for each meeting will be shared with the Town within five (5) business days after the meeting.

PHASE 200 – REVIEW OF EXISTING CONDITIONS AND FIELD INVESTIGATIONS

Task 201 – Data Request & Review

Consultant will prepare and submit a data request to the Town to obtain information necessary for completion of the scope of services. Such information may include previous capacity analysis reports, operational data and procedures, potable water high-service pump station historical discharge flows and pressures, and ground storage tank water levels.

Task 202 – Topographic Survey

A topographic survey will be conducted to record the existing facilities at Riner WTP, additional Town property currently utilized for church parking, proposed route for connecting to the existing water

transmission main, and to capture utility connection points such as sanitary sewers, domestic water, stormwater, electric, and natural gas facilities.

Task 203 – Geotechnical Study

CHA will have four (4) geotechnical borings completed; one within the footprint of the proposed electrical/operations building, two within the footprint of the proposed ground storage tank, and one exfiltration test to support design of the stormwater pond.

PHASE 300 – PRELIMINARY DESIGN

Task 301 – Water Blending Analysis

The purpose of the study described in this scope of work is to evaluate blending of two finished water sources using City of Winter Haven’s treated water system (up to 500,000 gallons/day) and Town of Dundee’s finished water system at the storage tank(s). Both utilities use the same source for potable water production while using chlorine as a disinfectant. Neither utility currently adds fluoride to the finished water. CHA will conduct a desktop analysis of blending of these two sources specifically focusing on blending ratios, resulting finished water quality parameters and recommend corrosion control strategies as applicable.

CHA will review existing data and summarize the existing potable water treatment processes/operation and finished water/distribution water quality data for each entity’s system applicable to the proposed interconnect at the storage tank(s). Historical data will be used for analyzing water quality stability, seasonal changes and treatment process impacts on water quality and corrosion control. The characterization will include, but is not limited to, summaries of the following water quality parameters for raw and finished water: pH, alkalinity, temperature, calcium, magnesium, hardness, chloride, sulfate, TDS, free/total chlorine, turbidity, aluminum, iron, manganese, fluoride, sulfide, bromide, dissolved carbon (organic and inorganic) and UVT.

Using the available system data, CHA will perform a preliminary screening of chemical compatibility using a water quality blending computer software. Three blending ratios will be evaluated 25:75; 50:50; 75:25. CHA will evaluate chemical compatibility (e.g., pH, alkalinity, organic carbon, etc.) and disinfection by-product formation potential (DBPFP) in the distribution system. DBPs will include TTHMs and HAAs. CHA will also study scaling and corrosion by determining the calcium carbonate precipitation potential (CCPP) and Langelier Saturation Index (LSI) of the individual supplies and simulated blends. CHA will recommend corrosion control strategies in compliance with the recently promulgated Lead and Copper Rule Revisions (LCRR) effective as of December 16, 2021.

The results of the testing and any associated recommendations will be presented in the Preliminary Design Report.

A laboratory allowance of \$3,500 is included as part of reimbursable expenses.

Task 302 – Develop Site Layout of Proposed WTP Improvements

CHA will develop a preliminary site plan layout including footprints of proposed storage tank, piping routes, layout of proposed building and utility connections. The preliminary site plan will also outline proposed stormwater management and infrastructure required by the proposed WTP upgrades.

Task 303 – Preliminary Design Report

The Consultant will prepare a draft Preliminary Design Report (PDR) and submit it to the Town for comments. The PDR will include the following:

- Project background
- Existing Riner WTP layout
- Proposed Riner WTP layout
- Proposed site/civil improvements (grading and stormwater management)
- Utility connections and improvements (potable water, sanitary sewer, etc.) to serve the new facility and improvements
- List of required permits/approvals and associated costs
- Opinion of Probable Construction Cost for the improvements

CHA will participate in a virtual review meeting with Town staff and finalize the PDR by incorporating Town comments. Draft and final PDRs will be submitted in Adobe Portable Document Format (PDF).

PHASE 400 – FINAL DESIGN PHASE SERVICES

Task 401 – 60% Design Documents

Preparation of 60% Construction Documents including drawings, specifications, and Opinion of Probable Construction Costs (OPCC). The 60% documents will include, at a minimum, all drawings necessary to relay the spatial arrangement and details of all major equipment, as well as specifications.

Construction Drawings are anticipated to include:

- Cover Sheet, Site Location Map
- General Notes, Drawing Index
- Symbols and Legend
- Erosion Control Plans
- Site Utility and Grading Plans
- Potable water and sanitary service plans (building level)
- Architectural/Structural Plans for the proposed building
- Mechanical and Electrical Plans
- Instrumentation one-line
- Stormwater Plans
- Storage Tank and Equipment Plans.

CHA will complete an internal QA/QC Review of the 60% submittal documents.

The 60% deliverable will include:

- One (1) electronic copy (Adobe PDF) of the 60% contract drawings and specifications.

- One (1) electronic copy (Adobe PDF) of the OPCC.

CHA will participate in a virtual meeting with Town to discuss 60% design review comments documenting agreed upon revisions for inclusion in the final design.

Task 403 – Final Design Documents

Upon receipt of the 60% submittal review comments provided by the Town, CHA will prepare the 100% Design documents, including:

- One (1) electronic copy (Adobe PDF) of the final contract drawings
- One (1) electronic copy (Adobe PDF) of the final specifications
- One (1) electronic copy (Adobe PDF) of the OPCC

PHASE 500 – PERMITTING SERVICES

CHA shall provide support services for the following permits/regulatory approvals. It is understood that the Town will pay all fees associated with permit/regulatory agency reviews.

Task 501 – FDEP Public Water System Construction Specific Permit

CHA will prepare an application for a Specific Permit to Construct PWS Components, under FDEP form No. 62-555.900(1), to obtain a construction permit for the new storage tank and pump. Applicable permit fee will be paid for by the Town. In addition, CHA will respond to up to two (2) requests for additional information from FDEP.

In addition to the application, CHA shall prepare and submit supporting documents with the application. These documents shall include a PDR.

Task 502 – SWFWMD Environmental Resource Permit

CHA will communicate with FDEP on the permit revision requirements and sufficiency of the permit application and supporting documents. CHA will prepare the FDEP environmental resource permit (ERP) revisions. The permit revision application will be submitted to SFWMD to apply for a permit revision. CHA will also prepare up to two (2) responses to Requests for Additional Information (RAIs) provided by FDEP during the permit review process (if necessary).

Task 503 – Building/Trade Permits

CHA will submit drawings and technical specifications to the Town's Building Department for review and comment. CHA will respond to up to two (2) requests for additional information from the Building Department related to the design. Fees related to the Building Department are to be paid by the Town or Contractor. CHA will submit two (2) copies of full-size, signed and sealed drawings and two (2) sets of technical specifications to the Building Department.

PHASE 600 – BIDDING SERVICES

CHA will provide the Bid Documents Submittal Package to the Town for Advertisement upon completion of design. CHA assumes that the bidding period (between Advertisement, Bid Submittal and Contract

Award date) will be limited to one hundred and twenty (120) calendar days. CHA assumes that the Town will provide specifications as needed for Division 0 of the specifications or that the Engineers Joint Contract Documents Committee (EJCDC) documents will be used. The Town will advertise the project for bidding, distribute the Bid Documents, advertise, and conduct the Pre-Bid Meeting, issue any addenda, conduct the Bid Opening, and review the bid packages, bonds, and insurance certificates submitted by the Bidders. This scope does not include services related to re-bidding or resolution of bid protests. If required, any bid protest assistance task will require approval under an extra work authorization (EWA). CHA will provide the following services during bidding.

Task 601 - Pre-Bid Conference and Addenda

CHA will attend up to one (1) Pre-Bid Conference. CHA will respond to Bidders' questions in the form of addenda and will submit PDF files of addenda electronically to the Town. CHA assumes up to three (3) addenda which may arise during the Bid process.

Task 602 - Review and Recommendation

CHA will receive the Bids from the Town, tabulate bids received and perform a technical bid evaluation of the apparent low bidders proposal. CHA will develop a draft recommendation of award for the responsible low bidder and submit to the Town. CHA assumes that the Town will review the bids for contractual requirements, including bid package, bonds, insurance, etc., and that the Town will manage the construction contract including notice of award, and notice to proceed.

PHASE 700 – CONSTRUCTION ADMINISTRATION

It is anticipated that the construction period will be approximately 12 months in duration, with 9 months of on-site construction activity. CHA shall provide the following Construction Administration Services. It is understood that CHA shall not supervise, direct, or have control over the Work, nor shall CHA have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident to the Work or any contractor's work in progress, for security or safety at the Site, nor for any failure of a contractor to comply with Laws and Regulations applicable to such contractor's performing and furnishing of its work. CHA neither guarantees the performance of any contractor nor assumes responsibility for Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

Task 701 – Pre-Construction Conference

- Pre-Construction Conference:
 - Plan, organize and conduct a pre-construction conference, develop and distribute a written summary to attendees.

Task 702 – Shop Drawings

- Review shop drawings and product submittals for conformance with the Contract Documents and with the design concept.
- This task includes reviewing up to fifty (50) shop drawing submittal packages and up to twenty-five (25) resubmittals.

Task 703 – Requests for Information

- Receive, review, evaluate, distribute and respond to up to eight (8) Requests for Information

(RFIs). Responses are anticipated to consist of supplemental Instructions, and sketches or drawings to resolve field conflicts encountered or interpretation of contract documents. Consultation and advice to Town staff during the construction process will be provided.

Task 704 – Changes in the Work

- Review, consult with Town, and respond to up to ten (10) Change Order Proposals.

Task 705 – Pay Request Review

- Review, recommend and submit to the Town for payment the monthly pay request from the Contractor. Up to twelve (12) pay requests are anticipated.

Task 706 – Monthly Construction Progress Meetings and Site Inspections

- Attend monthly construction progress meetings and site visits. Preparation of meeting agendas and meeting summaries are assumed to be the responsibility of the Contractor. CHA will review and comment on the meeting summaries provided by the Contractor. Concurrently on the day of the monthly construction progress meeting, observe the construction of the Project and discuss any concerns with the Owner. Up to twelve (12) monthly progress meetings/site visits are anticipated.

Task 7.7 – Substantial Completion Inspection

- The requirements for Substantial Completion shall be as defined in the Contract Documents. A Substantial Completion Inspection shall not take place until conditions have been met and required submittals received as defined in the Contract Documents.
- Conduct substantial completion inspection of the Project and prepare the punch list.
- Attend one process equipment performance testing event conducted by the Contractor.
- Review and monitor results from performance testing as provided by Contractor.

Task 7.8 – Final Completion Inspection and Record Drawings

- The requirements for Final Completion Inspection shall be as defined in the Contract Documents. A Final Completion Inspection shall not take place until conditions have been met and required submittals received as defined in the Contract Documents.
- Conduct a Final Completion Inspection of the Project and provide a Certification of Final Completion to the Town and Contractor.
- The specs will require the Contractor to maintain (and make available for CHA review) as-built mark-ups throughout construction and provide formal Record Drawings (in AutoCAD format). The provision of complete Record Drawings shall be a condition precedent to CHA's recommendation of final payment to Contractor.
- CHA shall submit three (3) full size (22" x 34"), hard copy sets of the Project Record Drawings, certified by Engineer of Record and containing appropriate notes or disclosures accompanying the certification that state the Engineer's determination that such modifications do or do not "materially" affect the permitted design.

Task 7.9 FDEP Final Certification for Facilities

- A final certification for Facilities will be submitted to FDEP.

C. 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 Meetings	1/6/2025	11/25/2025	635
Phase 2 – Review of Existing Conditions and Field Invest	1/6/2025	2/5/2025	30
Phase 3 – Preliminary Design	2/5/2025	4/6/2025	60
Phase 4 – Final Design	4/6/2025	7/5/2025	90
Phase 5 – Permitting Services	6/5/2025	8/4/2025	60
Phase 6 – Bidding Services	8/4/2025	10/3/2025	60
Phase 7 – Construction Administration	10/3/2025	10/3/2026	365

D. Compensation

Compensation will be a lump sum amount of **\$348,915.84**. Compensation for the services provided herein shall be due and payable monthly. The following table shows the cost breakdown for each Task described herein.

Phase	Lump Sum Fee
Phase 1 – Project Administration and Meetings	\$20,615.08
Phase 2 – Review of Existing Conditions and Field Investigations	\$42,227.72
Phase 3 – Preliminary Design	\$59,622.88
Phase 4 – Final Design	\$123,108.98
Phase 5 – Permitting Services	\$14,508.05
Phase 6 – Bidding Services	\$12,497.88
Phase 7 – Construction Administration	\$76,335.25
Total Lump Sum Fee	\$348,915.84

E. Town’s Responsibilities

The Town staff responsibilities are as follow:

- Provide data required to complete the tasks as requested by the Consultant.
- Attend progress meetings with the Consultant.
- Provide necessary historical data and contact information for completion of regulatory permits.
- Provide comments and feedback on the draft report.
- Provide comments and feedback on the construction drawings and specifications.
- Provide comments and feedback on the OPCC.
- Provide Division 0 Specifications for compilation of Bid Documents.

F. Services Not Included

- Reclaimed water system master planning.
- Utility rate study.
- Grant applications.
- Participation in FDEP rulemaking.
- Wetlands and/or environmental investigations.
- Resident Project Representative services or other inspector services beyond those described herein.
- Investigation of nor remedy to any structural or other needs of the existing 250,000-gallon ground storage tank

G. Assumptions

The Scope of Services and compensation arrangement outlined are based on the following assumptions:

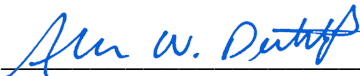
- The Town will provide access to the WTP site to perform the site visits and topographic survey.
- The Town will provide review comments on the deliverables within two (2) weeks of submittal.
- Third pump added for redundancy only; electrical service not upgraded to accommodate three duty pumps.

H. Approval

OWNER
Town of Dundee

CONSULTANT
CHA Consulting, Inc.

Name:
Title:



Name: Allen Dethloff, PE
Title: Project Team Leader

DATE: _____

DATE: 12/6/2024

