

Scope of Services

Dundee Alternative Water Supply (AWS) Receiving Facility (Part I) At Hickory Walk

Pursuant to Agreement RFQ-01, Master Continuing Professional Consulting Agreement, the Town of Dundee has requested that the Consultant provide certain professional services in support of an AWS Receiving Facility (Project) as further detailed in this Scope of Services.

A. Project Background and Description

The Polk Regional Water Cooperative (PRWC) is developing sustainable and drought resistant AWS projects for the participating member communities. The Town of Dundee (Dundee) is recognized as a participant of the PRWC Second Amended and Restated Implementation Agreement for the Southeast Wellfield Project. The Hickory Walk Water Treatment Plant (WTP) is one of the locations that AWS will be delivered to via a transmission pipeline that is scheduled to be online by 2027. The infrastructure being constructed by the PRWC requires the members to plan, design and construct facilities by 2027 to receive the water as a base load, adjust the water quality as needed, and provide that water to their customers. Dundee has received funding through the Heartland Alliance funding requests for planning thru construction of the facilities necessary. Dundee has requested Dewberry Engineers Inc. (Consultant) provide the required engineering services in support of the Project.

Upon authorization to proceed from Dundee, the Consultant will provide the following identified services. The Consultant shall ensure that all design, bid, and construction documents produced by the Consultant or their subconsultants for Dundee will be consistent with the Dundee's standards. This authorization shall be in full force and effect until the Consultant completes all services as described in this authorization and any subsequent modifications hereto.

Phase 100 – Project Management

Task 101 – Project Management

This task consists of overall management of the Project including contract administration, budget management, invoicing, monthly status reports, scheduling, and coordination with Dundee and Consultant's subconsultants.

Task 102 – Kick-off Meeting and Review Meetings

The Consultant will attend one kickoff meeting with Dundee. The Consultant will prepare a meeting agenda and meeting minutes. Meeting minutes shall be distributed within three working days of the date of the meeting.

The Consultant will attend the following additional meetings with Dundee. The Consultant will prepare a meeting agenda and meeting minutes. Meeting minutes shall be distributed within three working days of the date of the meeting.

- Review of Water Quality and Blending Analysis Technical Memorandums (1 review meeting for technical memorandums)
- 30% preliminary design report review

Phase 200 – Support Services

Task 201 – Land Survey Services

We will perform a Topographic Survey of the site in accordance with the Standards of Practice set forth in Chapter 5J17-052 of the Florida Administrative Code. We will collect spot elevations at fifty (50) foot intervals within the site and at all grade breaks therein. Utilities will be located by above ground evidence and as detailed at manhole and structure locations within the limits of survey. Manhole and structure details will include top elevation, inverts, sizes, material and direction when accessible. We will provide final drawings that reflect one (1) foot contours. This survey will be prepared in accordance with the Standards of Practice set forth in Chapter 5J17-052 of the Florida Administrative Code. two (2) certified copies and electronic file in PDF and AutoCAD formats.

Task 202 – Subsurface Utility Investigation Engineering Services (SUE)

Dewberry will perform Subsurface Utility Engineering (SUE) investigation within the limits of the project using the methods and procedures outlined below for up to seven (7) test holes.

Per Florida Statutes, we will place a Sunshine One Call request to have the subsurface utilities marked on the ground by the subsurface utility owner or their representatives. During the call we will provide the project limits and other important information necessary for the response to this call. We will also coordinate with the utility representatives, in the field, to clarify the project limits and our scope of work.

Once this has been accomplished, and in compliance with the two (2) business day waiting period, we will begin our SUE activity.

We will then verify the subsurface utility markings made by the utility company representatives using the American Society of Civil Engineers (ASCE) “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data”.

SUE Quality Level “B”

Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.

Through the use of electronic radio wave measuring devices, we will verify and expand on the markings made as a result of the Sunshine One Call made for this project. This investigative tool is applicable to conductive, “toneable” subsurface utilities only. We are unable to designate subsurface utilities such as Polyvinylchloride (PVC) pipe. We will attempt to identify non-conductive subsurface utilities through direct non-invasive subsurface utility vacuum excavation. No guarantee can be made that all subsurface utilities will be identified within the project limits. The resulting information will then be surveyed using the project survey control and performed to the Standards of Practice as set forth in Florida Statutes 61G17-6.

SUE Quality Level “A”

Precise horizontal and vertical location of subsurface utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, at the specific point at which the test holes are made.

We will then attempt to obtain from the exposed utility the size, type and measurement down to the subsurface utility. Minimally intrusive soft vacuum excavation equipment will be used to reduce the potential for subsurface utility damage. No guarantee can be made that all subsurface utilities will be identified within the project limits. The resulting information will then be surveyed using the project survey control and performed to the Standards of Practice as set forth in Florida Statutes 61G17-6.

Task 203 – Water Quality Sampling

Dewberry will host a kickoff conference call with Dundee to review project goals and objectives, schedule, sampling program, and information request.

Dewberry will collect water samples from the Hickory Walk WTP, once a week, for four consecutive weeks. The water samples will be tested by a National Environmental Laboratory Accreditation Program (NELAP) certified lab, retained by Dewberry, for analysis and reporting. The parameters for analysis and test method are provided in the following list. These parameters will be modified if the data collection indicates that the water quality data already exists in Dundee's records.

- Chloride EPA 300.0
- Fluoride EPA 300.0
- Sulfate EPA 300.0
- Sodium,EPA 200.7,ICP,Drinking Water
- Iron,EPA 200.7,ICP,Drinking Water
- Iron,EPA 200.7,ICP,Dissolved
- Manganese,EPA 200.8,ICPMS,Drinking Water
- COLOR,2120C,WA
- .PH,SM4500H+B,Drinking Water
- Total Dissolved Solids,SM2540C,WA
- Alkalinity,2320B,Aqueous
- Ammonia,350.1,Aqueous
- Calcium,EPA 200.7,ICP,Drinking Water
- TOC,5310B ,Aqueous
- Hardness, Total (SM 2340B)
- Magnesium,EPA 200.7,ICP,Drinking Water
- Arsenic,EPA 200.8,ICPMS,Drinking Water
- NO3,NO2 4500NO3F,Aqueous
- Total Inorganic Carbon
- Total Sulfide (field test)

Phase 300 – Preliminary Design

Task 301 – Data Collection / Site Visits

The Consultant shall review the collected historic data and readily available documentation related to the Hickory Walk WTP and distribution system. It is assumed Dundee will provide record drawings for the WTP, existing water quality data, WTP flow data. The Consultant will include one (1) site visit to the Hickory Walk WTP to confirm data.

Task 302 – Blending Analysis Technical Memorandum

After receiving the water quality results from Task 203, Dewberry will perform a blending analysis with the predicted SELFA WPF water quality. The projected water quality for the

SELFA WPF will be based on data provided in the Draft February 2023 Technical Memorandum 1 Water Quality and Compatibility Recommendations. The analysis will focus on the same corrosion control metrics reviewed in the Draft February 2023 report (Langelier Saturation Index, Larson Index, Ryznar Stability Index, Chloride-to-Sulfate Mass Ratio, Calcium Carbonate Precipitation Potential, Total Hardness, Alkalinity) only. The analysis will investigate up to six water quality blending ratios between the two water supplies.

The results of this analysis along with recommendations for water quality adjustments will be presented in a draft Technical Memorandum (TM). Dewberry will attend a Teams call with Dundee to review the water blending memorandum. The final TM will be provided to Dundee following the review call. The TM will be included in the Preliminary Design Report as an appendix.

Task 303 –Preliminary Design Report (PDR)

Upon completion of the TM's identified in Task 302, the Consultant will prepare a PDR for the Project. The PDR will summarize the findings and decisions of the TMs as well as provide the basis for permitting and identification of Project elements for final design and construction: The PDR will have the following chapters and sections:

- 1.0 Introduction
- 2.0 Permitting Requirements
- 3.0 Capacity analysis
- 4.0 Water Quality and Treatment Requirements
- 5.0 Design Criteria
 - 5.1 General
 - 5.2 Raw Water Wells and Well Pumps
 - 5.3 High Service Distribution Pump Station
 - 5.4 Ground Storage Reservoir
 - 5.5 Chemical Feed and Storage System
 - 5.6 Site Plan and Yard Piping
 - 5.7 Civil/Stormwater
 - 5.8 Structural
 - 5.9 Electrical
 - 5.10 Instrumentation and Controls
 - 5.11 Plumbing/HVAC – No restrooms
 - 5.12 Site Demolition and Abandonment
 - 5.13 Maintenance of Plant Operation
- 6.0 Schedule and Construction Sequence
- 7.0 Engineer's opinion of probable construction cost

Three (3) hard copies and one (1) electronic copy in Portable Document Format of the report shall be submitted to Dundee.

Phase 400 – Final Design Documents

No services under this task are included for Part 1.

Phase 500 – Permitting Services

Task 501 Pre-Application Meetings

This phase consists of the preparation and submittal of the forms and documents that are required for obtaining regulatory and construction permits / approvals for the Project. It is anticipated for this scope of services that only pre-application meetings will be held to provide the necessary information for the development of the PDR. The Consultant will prepare an agenda and the necessary documents to convey the intent of the design and to have meaningful dialog to identify the permitting requirements. The following preapplication meetings are anticipated:

- Specific Permit to Construct Public Water System Components (Polk County Health Department / Department of Health)
- Environmental Resource Permit - stormwater, jurisdiction wetlands / waters of the State, sovereign submerged lands, etc. (Southwest Florida Water Management District)
- Sand Skink Incidental Take Permit (Fish and Wildlife Service) if required
- Gopher Tortoise Relocation Permit (Fish and Wildlife Service) if required

Phase 600 – Bid Phase Services

No services under this task are included for Part 1.

Phase 700 – Construction Administration Services

No services under this task are included for Part 1.

Phase 800 – Resident Project Representative Services

No services under this task are included for Part 1.

Deliverables

The Consultant shall prepare and submit to Dundee, including electronic format when applicable, the following deliverables:

Task	Activity	Deliverable
102	Meetings	Meeting agenda and minutes
201-204	Support Services	Three (3) hard copies of reports / drawings (signed / sealed for survey documents); one (1) electronic copy (Portable Document Format and / or AutoCAD)
302	Basis of Design Report or Preliminary Design Report	Three (3) hard copies (one signed / sealed) and one (1) electronic copy

B. Schedule

Consultant will proceed with the services identified herein immediately upon receipt of an executed copy of this Agreement and a formal Notice-to-Proceed from Dundee. An updated electronic version of the Project schedule in Microsoft Project will be provided to Dundee within 10 working days from the issuance of the Notice-to-Proceed. Delivery of the schedule may be in other electronic formats so long as they accurately portray the approved scope of services with sufficient detail subject to staff approval.

C. Compensation

This Agreement establishes a not-to-exceed cost of \$156,782.06 for Part 1 Services. Compensation for the services performed under this Agreement shall be on an hourly, not-to-exceed basis using the current hourly rate schedule as set forth in the Master Agreement. A summary of the estimated labor costs is provided in Attachment A-2 for reference only. Each invoice submittal shall include a tabular summary of the originally estimated labor costs by phase in accordance with Attachment A-2, fees invoiced to date, and the balance remaining per phase.

D. Dundee's Responsibilities

Dundee will provide the following information to the Consultant and / or perform the following services related to the Project:

- Project Manager and single point of contact
- Timely reviews of deliverables (2 weeks) with consolidated comments
- Access to existing potable water facilities

E. Services Not Included

The following services are not included in the Scope of Services for the Project:

- Submissions for Development Review (To be part of Final Design scope if needed)

F. Assumptions

The Scope of Services and compensation arrangement outlined in this Consultant Services Authorization are based on the following assumptions:

- Dundee will provide record drawings for Hickory Walk WTP.
- Dundee will provide available data on anticipated future flows for Hickory Walk WTP.
- The site has no wetlands and requires minimal environmental review.
- No permitting fees are required as applications are not part of this scope of services.

Acceptance of the proposal and terms by the undersigned:

By: _____

Samuel Pennett

Mayor of Town of Dundee

By: _____

Lita O'Neill

Town Clerk of Dundee

Date: _____

APPROVED AS TO FORM AND CORRECTNESS:

By: _____

Date: _____