# TASK ORDER No. 2

# CONTINUING PROFESSIONAL SERVICES (Hydrogeological)

THIS TASK ORDER FOR CONTINUING PROFESSIONAL SERVICES ("Task Order") is made on the day of \_\_\_\_\_\_\_, between the **City of Lake Worth Beach**, a Florida municipal corporation ("City") and **Stantec Consulting Services**, **Inc.**, a Florida corporation. ("CONSULTANT").

## 1.0 Project Description:

The City desires the CONSULTANT to provide those services as identified herein for the Project. The Project is described in the CONSULTANT's Proposal, dated June 12, 2025, and services are generally described as: Wellfield Condition Assessment (the "Project").

## 2.0 Scope

Under this Task Order, the CONSULTANT will provide the City of Lake Worth Beach with hydrogeological consulting services for the Project as specified in the CONSULTANT's proposal attached hereto and incorporated herein as Exhibit "1".

## 3.0 Schedule

The services to be provided under this Task Order shall be completed by the end of the fiscal year 2025 or until the Not-To-Exceed amount is reached.

## 4.0 Compensation

This Task Order is issued for a lump sum, Not-To-Exceed amount of \$62,838.00. The attached proposal identifies all costs and expenses included in the lump sum, not to exceed amount.

# 5.0 Project Manager

The Project Manager for the CONSULTANT is Tim Cozart, phone (954) 851-1572; email: tim.cozart@stantec.com; and, the Project Manager for the City is Ashley Sidar phone: (561) 724-9669; email: asidar@lakeworthbeachfl.gov.

# 6.0 Progress Meetings

The CONSULTANT shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

#### 7.0 Compliance with section 787.06, Florida Statutes.

By signing this Task Order before a notary public and taking an oath under the penalty of perjury, the CONSULTANT attests and warrants that the CONSULTANT does not use coercion for labor or services as defined in section 787.06, Florida Statutes (2024).

## 8.0 Authorization

This Task Order is issued pursuant to the Continuing Professional Services Agreement (Hydrogeological) based on RFQ#23-300 between the City of Lake Worth Beach and the

CONSULTANT, dated <u>March 28, 2023</u> ("Agreement" hereafter). If there are any conflicts between the terms and conditions of this Task Order and the Agreement, the terms and conditions of the Agreement shall prevail.

IN WITNESS WHEREOF, the paragraph as of the day and year set forth above.	rties hereto have made and executed this Task Order No.
	CITY OF LAKE WORTH BEACH, FLORIDA
ATTEST:	By:Betty Resch, Mayor
By: Melissa Ann Coyne, MMC, City Clerk	
APPROVED AS TO FORM AND LEGAL SUFFICIENCY:	APPROVED FOR FINANCIAL SUFFICIENCY:
By: Glen J. Torcivia, City Attorney	By: Yannick Ngendahayo, Financial Services Director
CONSULTANT: ST	ANTEC CONSULTING SERVICES, INC.
	By: Authorized Representative
[Corporate Seal]	
STATE OF COUNTY OF COUNTY OF	
notarization on this 29 day of	dged before me by means of physical presence or online 2025, by Timohoy Cozad as the NEC CONSULTING SERVICES, INC., a corporation Florida, who is personally known to me or who has ntification, and who did take an oath under penalty of on 787.06, Florida Statutes, are true and correct, and that he going instrument and bind STANTEC CONSULTING
Notary Spal: My Comm. Expires June 05, 2027 No. HH 385751	Notary Public Signature

Exhibit "1" (6-Pages)

#### **EXHIBIT "A"**

#### **TASK ORDER NO. 2**

#### WELLFIELD CONDITION ASSESSMENT

#### **JUNE 12, 2025**

#### **INTRODUCTION**

The City of Lake Worth Beach (CITY) entered into a Professional Services Agreement with Stantec Consulting Services, Inc., (CONSULTANT) on March 28, 2023, under RFQ No. 23-300. This agreement is for CONSULTANT to provide CITY with professional hydrogeological services.

## **SCOPE**

The City owns and operates the Water Treatment Plant (WTP) located at 301 College Street in Lake Worth Beach, Palm Beach County, Florida. The WTP site has an area of approximately 17 acres and is surrounded by residential areas. The WTP has a design capacity of 17.4 million gallons per day (MGD), split as a 12.9 MGD lime softening plant and a 4.5 MGD reverse osmosis (RO) facility. The Consumptive Use Permit has an annual allocation of 4,106 million gallons (MG). The WTP provides drinking water from two separate aquifers; the Surficial aquifer (SA) and the Floridan aquifer (FA). The lime softening treatment process is used to treat water from the SA production wells and the RO treatment process is used to treat the water from the FA production wells. The SA raw water is treated with chlorine, ammonia, and lime and then filtered before disinfection. The FA raw water is treated with RO membranes to remove salt impurities. The two types of treated waters, produced from two different aquifers, are blended and disinfected with chloramines prior to being distributed to the consumer.

The purpose of this scope of services is to provide the CITY with professional engineering and hydrogeological services for the Wellfield Condition Assessment. The objective is to evaluate the SA and FA well performance to ensure that the wells are operating within an optimal range. This includes determining if productivity has declined in each well and if water quality issues such as elevated SDIs and sand production are occurring. The Wellfield Condition Assessment will provide initial data needed to identify potential problems wells and where maintenance, rehabilitation and/or future replacement is needed by providing analyses of water quality and well performance data. A total of 11 SA wells and 3 FA wells will be tested.

#### **SCOPE OF WORK**

The CONSULTANT will provide professional engineering and hydrogeological services to perform a Wellfield Condition Assessment.

- 1. Project Management, Meetings, and QA/QC
- 2. Review of Historical SA and FA Production Well Documents
- 3. Wellfield Condition Assessment and Report (excluding SA production wells 3, 6, 7, and 14)



## Task 1.0 - Project Management, Meetings, and QA/QC

Stantec will provide overall coordination, management, and QA/QC for the tasks to be performed under this work authorization. The coordination shall consist of tracking the budget and deliverables, and monitoring project progress.

The Project Manager is involved with the everyday operations of the project and has routine interaction with the CITY Project Manager. Project management activities include management and staffing, budget management, schedule management, quality management, project correspondence, and coordination with the CITY permitting project as necessary throughout the duration of the project.

## The Project Manager shall provide the following:

- Provide monthly status reports that include work completed during the current period, work planned for the next period, completed meetings and status of meeting minutes, planned meetings for the next period, and a summary milestone schedule of the next three months of activities including deliverables and meetings involving the CITY or regulatory agencies. Key decisions will be tracked in a decision log and incorporated into the monthly status report documenting key decisions from the current month.
- Provide a project schedule and monthly updates of schedule changes.
- Prepare monthly progress reports with an updated schedule and milestones and submit them to the CITY Project Manager.

#### Deliverables:

- Monthly progress reports with an updated schedule and milestones will be prepared and provided by the CONSULTANT.
- Agenda and meeting minutes for the meetings will be prepared for any meetings conducted by the CONSULTANT. Meeting minutes will be submitted within one week after the meeting and distributed to the meeting attendees.

# Task 2.0 – Review of Historical SA and FA Production Well Documents

The CONSULTANT shall request and review available drawings and other relevant historical documents available from the CITY related to the SA and FA raw water supply wells. The objective of Task 2.0 is for the CONSULTANT to have a thorough understanding of the SA and FA wellfield system prior to performing field testing, if the documents are available.

# These documents ideally should include, but not limited to, the following:

- Original construction documents:
  - Well head diameter and materials
  - o Grade elevation
  - Casing size, depths, materials, and age
  - Screen and gravel-pack size and materials
  - o Open borehole size and depth
  - Historic and current static and pumping water levels and pumping rates Plotted
  - o Historic and current water quality data (sand content, silt density index, etc.) Plotted
  - Summary of rehabilitation efforts (methods and results)
  - Maintenance records (well-specific service)



- o 100 yr. FEMA Flood Elevation
- WTP SCADA and operational data
- Other relevant information for the SA and FA production wells

#### Task 3.0 – Wellfield Condition Assessment

The CONSULTANT shall coordinate with the CITY to determine the appropriate schedule for wellfield testing. It is anticipated that one well will be tested at a time under startup conditions and as many as three wells will be tested each day. The existing pumping system will be used during the testing of each well. This scope does not include assessment of SA production wells 3, 6, 7, and 14.

# **Subtask 3.1 – Field Testing Services**

The CONSULTANT will provide the services for field testing of the CITY's 11 SA production wells and 3 FA production wells to evaluate water quality and well performance of each well in each aquifer. The existing well pumps and flow meters will be used to conduct the tests. Water generated during the assessment activities will be sent to the water treatment plant. The data collected as part of the assessment activities will be used to evaluate the wellfield production and identify problematic wells in need of rehabilitation, additional intrusive assessment work, or replacement. Rehabilitation of any problematic well(s) will improve the reliability of the well to continue to produce raw water of a quality and quantity compatible with different treatment facilities.

## Field water quality parameters will include the following:

- Specific conductance
- Total dissolved solids (TDS)
- Temperature
- pH
- Dissolved oxygen (DO)
- Salinity
- Soluble and total iron
- Hydrogen sulfide
- Turbidity
- Sand content
- Silt density index (SDI) values

The CONSULTANT will measure and record field well performance parameters. Additionally, water level measurements will be used to evaluate the accuracy of the data being recorded by the continuously monitoring pressure transducer and SCADA system, if applicable. These data will be used to determine if the CITY's transducers and SCADA system are functioning correctly or if they are in need of repair. The CONSULTANT will evaluate discrepancies, if any, between installed flow meters, and SCADA system data evaluated compared to readings at the wellheads and manual water levels obtained during testing.

# Field well performance parameters will include the following:

- Water levels: static and pumping
- Drawdown and specific capacity will be calculated
- Pressure readings



- Voltage and amperage recording (measurements by City O&M staff)
- Pumping rates

The CONSULTANT will conduct visual inspections on the above grade wellhead piping and equipment for each wellsite and the overall wellhead condition.

The above ground equipment will include the following:

- Overall condition of the above grade equipment and piping (leaks and corrosion)
- Concrete pad
- Check valve
- Air release valve (ARV)
- Pressure gauges
- SCADA system
- Casing vents
- · Elevation of the casing terminus
- Water level measuring ports accessibility
- Sampling ports
- Electrical components
- Pumping water levels relative to well pump settings if available

#### Subtask 3.2 - Meetings with the City

The CONSULTANT will schedule and attend meetings with the CITY's project manager and water treatment plant staff to coordinate the testing, including obtaining the required pumping rates for each well during field testing, and a daily operational schedule for the anticipated six days of testing for water quality and well performance data at the well sites. The CONSULTANT will provide meeting minutes to document the discussions.

#### **Subtask 3.3 – Report Following Completion of Field Activities**

The CONSULTANT will be responsible for collecting and reporting the data for the SA and FA production wells to be tested; reviewing operational data (pumping rates and drawdown data, and water quality data); wire to water efficiency (if available), and preparing a technical memorandum for the SA and FA production wells that summarizes the data and provides the compliance status of the wellfield.

## **ASSUMPTIONS**

Please note that this Scope of Work is based on the following assumptions:

- The CONSULTANT reserves the right to use available, qualified personnel to complete the tasks under this scope of work.
- Field work will be completed in five working days over a two-week period. Should additional field
  and reporting services be required beyond the budget, the CONSULTANT will submit a proposal
  to the CITY to utilize the Allowance budget prior to performing the work.



## **OBLIGATIONS OF THE CITY**

This scope of services, level of effort, and fee development is based on the timely provision of the following:

- Make available to CONSULTANT any pertinent documentation concerning this project.
- Provide a CITY Project Manager as a point of contact for coordination.
- Review CONSULTANT submittals and provide consolidated comments within two weeks of receipt.
- Provide O&M staff to coordinate turning on and shutting off wells during testing and measure voltage and amperage at the wells during specific capacity testing.
- Provide pump curves and motor specifications for each pump/motor combination.
- CITY comments and input on submittals will be provided to the CONSULTANT's Project Manager.
   Any differences between the CITY's staff will be addressed by the CITY Project Manager.

# **DELIVERABLE/TASK SCHEDULE**

The work should be completed over a 3-month period. The CONSULTANT will deliver or complete the below deliverables/ tasks by the following weeks from Notice to Proceed (NTP):

Task	Task Description	Weeks From NTP
1.0	Project Management, Meetings, and QA/QC	12 weeks
2.0	Review of Historical SA and FA Production Well Documents	4 weeks
3.0	Wellfield Condition and Assessment	On-going
3.1	Field Testing Services	8 weeks
3.2	Meetings with the City	On-going
3.3	Report Following Completion of Field Activities	12 weeks



## **COMPENSATION**

The CITY shall pay the CONSULTANT a fixed fee of \$62,838.00 for providing the services described in the scope of work. The work shall be completed and compensated in accordance with the table below by the fixed fee payment method. Invoices will be submitted monthly based on a percentage of completion of services per task.

Task Description	Fee
Task 1.0 - Project Management, Meetings, and QA/QC	\$7,595.00
Task 2.0 - Review of Historical SA and FA Production Well Documents	\$10,330.00
Task 3.1 - Field Testing Services	\$20,778.00
Task 3.2 - Meetings with the City	\$3,780.00
Task 3.3 - Report Following Completion of Field Activities	\$20,355.00
Subtotal	\$62,838.00
Allowance	\$5,000.00
TOTAL	\$67,838.00

Respectfully submitted,

Timothy Cozart Project Manager Stantec Consulting

Cc: Neil Johnson, Stantec Caroline Smith, Stantec

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