

Task Order for the Lake Worth Beach Geotechnical Engineer Services

TASK ORDER NO. 4

THIS TASK ORDER ("Task Order") is made on the ____ day of _____, 2020, between the **City of Lake Worth Beach**, a Florida municipal corporation located at 7 North Dixie Highway, Lake Worth Beach, Florida 33460 ("City") and RADISE International, LC, a Florida corporation ("Consultant").

1.0 Project Description:

The City desires the Consultant to provide those services as identified herein and generally described as: Test Wells 17A & 18A (the "Project").

2.0 Scope

Under this Task Order, the Consultant will provide professional services to the City as detailed in the Consultant's Proposal, dated June 18, 2020, attached hereto and incorporated herein as Exhibit "1".

3.0 Schedule

The services to be provided under this Task Order shall be completed within 70 calendar days (50 business days) from the City's approval of this Task Order or the issuance of a Notice to Proceed.

4.0 Compensation

This Task Order is issued for a lump sum, not to exceed amount of \$70,851.00. 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 Andrew Nixon, P.E., phone: (561) 841-0103; email: andrew.nixon@radise.net; and, the Project Manager for the City is Julie Parham, PE, phone: (561) 586-1798; email: jparham@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 Authorization

This Task Order is issued in compliance with the Consultants' Competition Negotiation Act, section 287.055, Florida Statutes, and pursuant to the First Amendment to Agreement for Professional Services between the City of Lake Worth Beach and the Consultant, dated March 11, 2020 ("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; however, the specific scope of services set forth in this Task

Order shall take precedence over any other more general description of services.

IN WITNESS WHEREOF the parties hereto have made and executed this Task Order on the day and year first above written.

CITY OF LAKE WORTH BEACH, FLORIDA

By: _____
Pam Triolo, Mayor

ATTEST:

By: _____
Deborah M. Andrea, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

By: _____
Glen J. Torcivia, City Attorney

APPROVED FOR FINANCIAL
SUFFICIENCY

By: _____
Bruce T. Miller, Financial Services Director

Consultant: **RADISE International, LC**

By: _____

[Corporate Seal]

Print Name: Panneer Shanmugam, PE

Title: President

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 22 day of June, 2020, by Panneer Shanmugam, as President of RADISE International, LC, which is authorized to do business in the State of Florida, and who is personally known to me or who has produced the following _____ as identification.



Notary Public

Print Name: Jenny Cadet

My commission expires: Nov 5, 2021



June 18, 2020

City of Lake Worth Beach
7 North Dixie Highway
Lake Worth Beach, Florida 33460

Attention: Julie Parham, PE
Phone: 561-586-1798
Email: jparham@lakeworthbeachfl.gov

RE: Proposal for Test Wells 17A & 18A
City of Lake Worth Beach
Palm Beach County, Florida

Dear Mrs. Parham, P.E.

RADISE International, L.C. (RADISE) is pleased to submit this proposal for the above referenced project. It is our understanding that the City of Lake Worth Beach needs to relocate two aquifer production wells. Two new potential well sites have been identified within the City limits. Therefore, RADISE proposes to conduct a subsurface exploration and test well program to determine the lithology and water quality at the potential well sites. This proposal presents our proposed scope of work, and establishes our schedule and fee for performing the work.

SCOPE OF SERVICES

The proposed scope of work for the project consists of the following:

1. Visit each site to field mark (paint and/or stake) the planned test locations and observe existing site conditions. The two sites are identified in Attachment B.
2. Notify Sunshine State One-Call of Florida, Inc. (SSOCOF) of the planned explorations to allow affected utility companies the opportunity to mark the location of buried utility lines in the proposed exploration areas. See below for further details.
3. Mobilize a sonic drilling rig to advance a boring to a depth of 300 feet at each site to develop the site lithology. The borings will be performed in general accordance with the procedures recommended in ASTM D-6914 with continuous core samples collected throughout the explored depths. The core samples will be approximately 4 inches in diameter.
4. During boring advancement, a temporary well with 5 feet of well screen will be installed in 20 feet intervals from the water table to a depth of 300 feet. Sampling will start at a depth of 60 feet below grade. A sample of water will be obtained from each interval using a drop hose and analyzed in the field for total dissolved solids and conductivity; samples will be labeled and retained.
5. Following completion of the drilling operations, the borehole will be backfilled with grout.

6. Visually classify the collected soil samples in the field with laboratory confirmation/QC verification of classifications using the Unified Soil Classification System (USCS). Assign and perform a series of laboratory test to ascertain soil index properties for the soils encountered in the borings.
7. Provide a memorandum summarizing the gathered information and laboratory test results.

We assume that access to the boring locations is readily available to our drilling equipment. In addition, we assume that permission from land owners, if different than the City, has been received to allow us to conduct our studies.

Prior to the mobilization of our drilling equipment, we will notify Sunshine 811 of our planned exploration to allow affected utility companies the opportunity to mark the location of buried "public" utility lines in the proposed exploration areas. The locating process will require a lead time of 3 to 5 business days. RADISE cannot take responsibility for damages to "private" underground lines or structures and/or underground services which do not subscribe to SSOCOF; their locations should be provided by the client prior to commencement of the field work. For further assurance, we recommend that a private underground utility locator be retained to scan the proposed boring locations using ground penetrating radar technology to identify underground utilities.

SCHEDULE/DELIVERABLES

Upon receiving written authorization to proceed, we will commence with field marking of the boring locations and preparation of the utility locate request. Mobilization for the drilling operations will occur soon after Sunshine 811 clearance of boring locations is received from the contacted utilities. These two upfront activities are expected to require about 4 weeks to complete.

The specified field drilling work is expected to require 6 days to complete. The laboratory testing program will require about 3 weeks to complete following completion of field work and the summary report can be completed within 2 weeks after completion of the laboratory testing program. We expect to provide the final report signed and sealed by a registered professional engineer within 10 weeks of notice to proceed; however, accelerations of this schedule may be facilitated if needed.

COMPENSATION & TERMS

Based upon our understanding of the project and interpretation of your requirements, we propose to perform the scope of work outlined previously for a Lump Sum Fee of **\$70,851.00**, as detailed in the Fee Breakdown on Attachment A. Our work will be performed in accordance with the terms and conditions of our City of Lake Worth Beach service contract (RFQ No. 18-303).

Soil samples obtained from the drilling operations will be retained by RADISE for a period of 90 days from the date of drilling and then they will be discarded unless alternate terms are agreed to in writing with the client.

CLOSURE

RADISE appreciates the opportunity to provide our services for this project, and trust that the scope of work and fee presented in this proposal are clear and understandable. Should the proposal contents require any clarification or amplification, please feel free to contact us.



Sincerely,
RADISE International, L.C.

A handwritten signature in black ink, appearing to read 'A. Nixon', is written over the company name.

Andrew Nixon, P.E.
Operations Manager

Attachments: A - Fee Breakdown



ATTACHMENT A - FEE BREAKDOWN
Test Wells 17A & 18A
City of Lake Worth Beach
Palm Beach County, Florida

	Qty	Unit	Unit Price	Total
1.0 FIELD EXPLORATION				
1.1 Stake borings, utility clearance & project coordination (Project Engineer)	16	Hour	\$ 135.00	\$ 2,160.00
1.2 Sonic Borings & Well Construction (2 to 300') - 3 days/site Provided by Earth Tech Drilling, Inc. (at Cost; Backup attached)				
1.2.1 Sonic Rig Mobilization	1	Each	\$ 1,200.00	\$ 1,200.00
1.2.2 Daily Personnel Mobilization	6	Day	\$ 325.00	\$ 1,950.00
1.2.3 Sonic Daily Rate	6	Day	\$ 3,700.00	\$ 22,200.00
1.2.4 8" Sonic Over Ride Casing	300	Foot	\$ 25.00	\$ 7,500.00
1.2.5 Compact Track Loader/Water Support	6	Day	\$ 475.00	\$ 2,850.00
1.2.6 1" PVC Well Materials	600	Foot	\$ 10.00	\$ 6,000.00
1.2.7 Wooden Core Boxes (10' per box)	60	Each	\$ 55.75	\$ 3,345.00
1.2.8 Groundwater Sampling Standby	30	Each	\$ 95.00	\$ 2,850.00
1.2.9 Hydrant Meter	1	Each	\$ 1,000.00	\$ 1,000.00
1.2.10 Borehole Grouting	600	Foot	\$ 8.00	\$ 4,800.00
1.3 Field Supervision, Borehole Logging & Groundwater Sampling				
1.3.1 Senior Engineering Technician (6 days @ 12 hrs/day)	72	Hour	\$ 60.00	\$ 4,320.00
1.3.2 Sampling Equipment	6	Day	\$ 250.00	\$ 1,500.00
TOTAL FIELD SERVICES				\$ 61,675.00
2.0 LABORATORY SERVICES				
2.1 Laboratory Visual Classification QC/Verification (Project Engineer)	4	Hour	\$ 135.00	\$ 540.00
2.2 Moisture Content (15 tests/boring)	30	Each	\$ 12.00	\$ 360.00
2.3 Grain Size Distribution (15 tests/boring)	30	Each	\$ 88.00	\$ 2,640.00
TOTAL LABORATORY SERVICES				\$ 3,540.00
3.0 PROFESSIONAL ENGINEERING AND REPORTING SERVICES				
3.1 Senior Project Engineer	6	Hour	\$ 155.00	\$ 930.00
3.2 Project Engineer	30	Hour	\$ 135.00	\$ 4,050.00
3.3 Draftsman	8	Hour	\$ 58.00	\$ 464.00
3.4 Administrative Assistant	4	Hour	\$ 48.00	\$ 192.00
TOTAL PROFESSIONAL SERVICES				\$ 5,636.00
TOTAL AMOUNT				\$ 70,851.00



**EARTH TECH
DRILLING**
Environmental / Geotechnical
954-974-2424

2703 NW 19th Street, Pompano Beach, FL 33069

Monitoring Wells Sparge Wells Direct Push
Geotechnical Drilling SONIC Drilling

CLIENT: Radise		Andrew Nixon	DATE	4/14/2020		
SITE: City of Lake Worth Beach Test Wells			PHONE	(561) 841-0103		
PROPOSED SCOPE OF WORK:						
(2) 300' Sonic Soil Borings w/ Water Samples collected every 20' using 1" PVC (Non-Prepack) (15 Samples per)						
8" x 150' Override Casing						
Grout Abandon Boring						
Wooden 5' Sonic Core Boxes						
SONIC DRILL			Unit	Unit Rate	Number of Units	Extended Price
Sonic Daily Rate (Compact Track) Price Includes a ten hour work day (7 to 5) Unless otherwise stated in this quote.						
Sonic Daily Rate			per day	\$3,700.00	6	\$22,200.00
Sonic Per Foot Rate 6" Casing			per foot			\$0.00
8" Sonic Over Ride Casing			per foot	\$25.00	300	\$7,500.00
						\$0.00
Compact Track Loader / Water Support			per day	\$475.00	6	\$2,850.00
WELL MATERIALS						
1" PVC Well Material (includes all annular backfill)			per foot	\$10.00	600	\$6,000.00
2" PVC Well Material (includes all annular backfill)			per foot			\$0.00
4" PVC Well Material (includes all annular backfill)			per foot			\$0.00
1" x 5' Prepacked Well Screen			each			\$0.00
Wooden Core Boxes (Supplied by client)			each	\$55.75	60	\$3,345.00
Well Completion (includes 30 min. development, 8" bolt-down manhole, concrete pad & lockable well cap						
4" x 4" Protective Riser completion			per well			\$0.00
12" Bolt-down completion			per well			\$0.00
			each			\$0.00
Above Grade Protector (Aluminum)			per well			\$0.00
MISCELLANEOUS						
Mobilization (Sonic Drill with all associated equipment)			roundtrip	\$1,200.00	1	\$1,200.00
Daily Mobilization (to and from site per day)			per day	\$325.00	6	\$1,950.00
Per Diem			per night			\$0.00
Permits			each			\$0.00
Decontamination Pad (incl. setup & breakdown)			lump sum			\$0.00
GW Samples (Estimated at 15 Minutes per sample)			each	\$95.00	30	\$2,850.00
Hydrant Meter / Water Support			ls	\$1,000.00	1	\$1,000.00
DOT Approved 55-gal Drum			each	\$60.00		\$0.00
Vacuum/Air Knife Bore Hole Clearing			per day			\$0.00
Development Time			per hour			\$0.00
Soil Boring Abandonment			per foot	\$8.00	600	\$4,800.00
Hand Work for Soil Borings and Wells			lump sum			\$0.00
Standby / Difficult Moving Time			per hour	\$450.00		\$0.00
Days to Complete Scope of Work	6	Submitted By: Charles Bucher	TOTAL QUOTE PRICE		\$53,695.00	

Attachment B

Test well 17A – 2nd/3rd Avenue North



Test Well 18A – John Prince Park



