

# HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS (HCBCC) PURCHASING DIVISION

DATE: June 3, 2019

BID NO. ITB 19-019-029 ADDENDUM No. 2

Project: LAKE JACKSON MONITORING WELLS AND EQUIPMENT

This addendum is being issued to revise the solicitation documents and answer questions received.

# Changes to the solicitation documents:

- 1. The **Bid deadline has been revised to Monday June 10, 2019 at 3:30 p.m**. All bids shall be submitted to Highlands County Purchasing, 600 S. Commerce Ave., Sebring, FL 33870.
- 2. The Bid Form has been revised. All bidders must use the Bid Form attached to this Addendum No.2.
- 3. The Marine Contractor license is not required for work under this project.
- 4. A Bid Bond and Construction Bond is not required for this project. Section 00410 Bid Bond and Section 00 600 Public Construction Bond have been deleted from this solicitation.
- 5. Remove spec on platforms and walkways. Contractor is responsible for building platform that will function for 2-year period.
- 6. The weather station specifications have been revised to allow either the Global Water WE-800 Weather Station or the Davis Wireless Vantage Pro2.
- 7. See attached **two** applicable specification**s** from the Water District- 1.) Data Format for Submission of Hydrologic Data and 2.) SWFWMD requirements for stream stage and discharge measurement.
- 8. The Streamflow platforms have been removed from this solicitation. The NEMA 4 box can be mounted on a galvanized metal pole.

#### **Questions and Answers**

1. What is the County's estimated budget for this bid?

**Answer:** Approximately \$100,000 total project cost.

2. Section 1.02.D.2 requires the surface water monitoring station to be constructed by a marine contractor holding a valid license in the State of Florida. Marine contractors are likely not going to be interested in mobilizing to the project to construct three small platforms. If they do, their mobilization costs are likely going to be excessive. Can the marine contractor requirement be waived if the Contractor can demonstrate prior experience and/or references constructing surface water monitoring platforms?

**Answer:** The requirement of a Marine Licensed Contractor is removed from this solicitation and project.

3. Is a licensed marine contractor required for this work? **Answer:** No that has been removed from the specifications.

4. Are the waterflow platforms required to be built a specific manner? **Answer:** The Contractor can propose a platform that will function and last for a

2year period. The County is not opposed to accessing the one gauge located in the lake by boat. Proper identification and marking of the well and stabilization of wells is the Contractors responsibility.

is the Contractors responsibility.

5. Concerning walkways, what is the plan?

**Answer:** Walkways to wells located in water have been removed from the specifications. County staff will use a boat to access secured wells located in water.

6. How many wells do you anticipate drilling?

Answer: At a minimum 10 wells.

7. Will the County Provide the Geologist to determine the well depth when drilling? **Answer:** The County will not provide a geologist. The AIM report has provided the minimum depth.

8. Will the County consider providing a Surveyor?

**Answer:** County staff is not able to assist on surveying. This will need to be provided by the Contractor.

9. Will the County consider adding Mobilization for the well drilling? **Answer:** Mobilization should be included in the pricing for the work.

10. Can the County provide a more specific depth of each well?

**Answer:** The County has identified the well depths based on data from 2015. The Bid form has been modified to add minimum depth for each well. A per foot cost is requested if depths must change based on geological information at the time of drilling.

- 11. Will the County award this project if they receive less than 3 bids? **Answer:** Yes, provided it is within budget.
- 12. Can the weather station be another brand that function similarly, like Campbell Scientific or Sutron?

**Answer**: The weather station specifications have been revised to allow either the Global Water WE-800 Weather Station or the Davis Wireless Vantage Pro2.

13. Can the flow monitor in the canal be done with Stream gauge monitoring rather than Telemetry flow monitoring?

**Answer:** No, Bidders are to follow the specifications.

14. Can the water level of the wells use a data logger and run on a long-term (est 3-5 year) lithium battery with download cable?

**Answer:** No, the equipment specified must be installed in compliance with the Water District specifications for gathering information with equipment as indicated in the solicitation package for flow data.

- 15. Do you intend to download data manually? Answer: No.
- 16. Would the County want to consider angle well run to 10' depth off concrete structure rather than vertical well to eliminate structure costs for monitoring? **Answer:** No, not for this project.
- 17.On the description of the wells, for shallow wells it says down to a maximum of 50 feet and for deep wells it says down to a maximum of 150 feet. Could you be more specific or possibly charge by the foot? How about choosing a depth, say 20 or 30 feet and then charge per foot beyond that?

**Answer:** After checking with SWFWMD and the AIM Report, the Bid form has been changed to reflect a depth and a lineal foot cost.

18. Concerning the weather station, the bid sheet says to quote a Global Weather Station. Are there allowable alternatives?

**Answer:** Yes, Page 33 of AIM report recommends either the Global Water WE-800 Weather Station or the Davis Wireless Vantage Pro2. Either of these is an allowable alternative.

19. Do you have anyone from the County who could show myself and my potential driller exactly where the wells are to be installed? He doesn't want to give me a price unless he is sure he can get a drill rig to the location without major issues.

**Answer**: See attached addresses for properties and property maps that also have similar detail in Appendix C of the AIM Report.

Proposed Well Site	STRAP	Parcel Number	Neighborhood	Parcel Owner
1	29342907009300011S	S29342907009300011	SEBRING SIDE STREET REDEV. 351 W. Center Ave	HIGHLANDS COUNTY BOARD OF CNTY COMM
2	28342302000M0006AS	S23342802000M0006A	LAKE JACKSON N.W. 3543 Lakeview DR	HIGHLANDS COUNTY BOARD OF CNTY COMM
3	29350611000000080C	C06352911000000080	SPARTA RD NORTH END  2756 Trojan Loop	HIGHLANDS COUNTY BOARD OF CNTY COMM
4	29343209000300070S	S32342909000300070	SEBRING SE LAKEVIEW DR AREA - <b>1431 S. Highlands Ave.</b>	HIGHLANDS COUNTY BOARD OF CNTY COMM
5	28342302000B00051S	S23342802000B00051	US 27 FAIRMOUNT DR TO SPARTA RD - <b>604 US 27 S</b>	CITY OF SEBRING
6	283423A0004500000C	C233428A0004500000	RURAL TRACTS IN 34/28 2120 US 27 N	HIGHLANDS COUNTY BOARD OF CNTY COMM
7	29341906025200000S	S19342906025200000	LAKE JACKSON HIDDEN BEACH AREA - 2800 Lakeview DR	CITY OF SEBRING

### **DIVISION 0 - SECTION 00300**

# REVISED BID FORM ITB 19-029

PROJECT IDENTIFICATION:	LAKE JACKSON MONITORING WELLS AND EQUIPMENT
THIS BID IS SUBMITTED TO:	Highlands County Board of County Commissioners Attn: Purchasing Division 600 S Commerce Ave., Sebring, FL 33870
BID SUBMITTED BY:	[Bidding Company's Name, 'Bidder']
	[Bidder's Authorized Representative's Name]
	[Bidder's Address, Building #, Street]
	[Bidder's Address, City, State, Zip]
	[Print Contact Person's Name for this bid]
	[Contact Person's Email Address]
	[Contact Person's Phone Number]

- A. The Bidder proposes and agrees, if this Bid is accepted, to furnish all labor, materials, and equipment to construct and complete the Work according to and as specified or indicated in ITB 19-029 and the Bidding Documents for the Bid Price and within the time periods stated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- B. Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will

remain subject to acceptance for thirty (30) days after the day of Bid opening. Bidder will sign and deliver the required number of the other documents required by this ITB within fifteen (15) days after the date of County's Notice of Award.

- C. In submitting this Bid, Bidder represents that:
  - Bidder has examined and carefully studied the Bidding Documents, including the following Addenda, receipt of all of which is hereby acknowledged:

Date	Number	Date	Number

- 2. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work;
- 3. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
- 4. Bidder acknowledges that County and Project Manager do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the Site. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto. Bidder does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the times, price, and other terms and conditions of the Contract Documents.
- 5. Bidder is aware of the general nature of the Work to be performed by County and others at the Site that relates to the Work.
- 6. Bidder has correlated information known to Bidder, information and observations obtained from visits to the Site and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- 7. Bidder has given Project Manager written notice of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in the Bidding Documents and the written resolution thereof by Project Manager is acceptable to Bidder, and the Bidding Documents are generally

- sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.
- 8. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid. Bidder has not solicited or induced any person, firm or corporation to refrain from Bidding, and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over County.

# D. Documentation included with Bid packet

		Required?	Included (check if yes)
1.	One (1) original (signed in blue ink), one (1) exact paper copy, and one (1) exact electronic copy (CD or thumb drive) of the submitted Bid.	Yes	
2.	Certificates from Section 00160  F.S. 287.135 F.S. 287.087 F.S. 287.133(3)(A) F.S. 287.134 Participation in E-Verify Local Preference Affidavit	Yes	
3.	Waiver of right to claim against payment/construction bond (Section 00836)	Yes	
4.	Woman or Minority Owned Business Certificate	If applicable	
5.	<ul> <li>Qualifications (See Section 00100, Article 3)</li> <li>List of 5 jobs of similar magnitude</li> <li>Resumes</li> <li>List of available equipment</li> <li>Five (5) reference letters</li> <li>Copies of required licenses</li> <li>List of sub-contractors, if applicable</li> <li>List of present commitments</li> </ul>	Yes	
6.	Bid security in the form of	Yes, over \$100,000.00	

# E. Pricing

1. This bid form has multiple work tasks to bid on. Each bidder can bid on one or more-line items. Award will be made to the lowest bidder for each line item. The County may elect to award the alternate bid items as budget allows.

# **QUANTITIES AND PRICING**

	Bid Item	UNIT	UNIT PRICE	EST. QUANTITY	EXTENDED PRICE
1	<sup>1</sup> Site 1: 2 inch shallow well	Linear Feet		50'	
1a	Instrumentation for Site 1 well	Lump Sum		1	
2	Site 2: 4 inch deep well	Linear Feet		150'	
2a	<sup>2</sup> Instrumentation for Site 2 well	Lump Sum		1	
3	<sup>3</sup> Site 3: 2 inch shallow well	Linear Feet		30'	
3a	Site 3: 4 inch deep well	Linear Feet		150'	
3b	Instrumentation for Site 3 wells	Lump Sum		2	
4	Site 4: 2 inch shallow well	Linear Feet		50'	
4a	Instrumentation for Site 4 well	Linear Feet		1	
5	Site 5: 4 inch deep well	Linear Feet		100'	
5a	Instrumentation for Site 5 well	Lump Sum		1	
6	<sup>3</sup> Site 6: 2 inch shallow well	Linear Feet		50	
6a	Site 6: 4 inch deep well	Linear Feet		150	

6b	Instrumentation for Site 6 wells	Lump Sum	2	
7	<sup>3</sup> Site 7: 2 inch shallow well	Linear Feet	30'	
7a	Site 7: 4 inch deep well	Linear Feet	150'	
7b	Instrumentation for two Site 7 wells	Lump Sum	2	
8	<sup>4</sup> Automated lake stage and Streamflow recorders	Lump Sum	3	
9	<sup>5</sup> Global Weather Station	Lump Sum	1	
	TOTAL BID PRICE			

<sup>&</sup>lt;sup>1</sup>All well prices include labor, materials and mobilization

#### Add Alternate Bid Items

Bid Item	Labor and Materials cost per site	Cost per foot	# sites
Single 2" shallow SAS well (≤ 50')	Cost for first 20'	Cost per foot over 20'	2
	LS	LF	
Single 4" deep SAS well (≥ 50')	Cost for first 50'	Cost per foot over 50'	2
	LS	LF	

F. Bidder agrees that the Work will be substantially complete within **ninety (90) days** and completed and ready for final payment within **one hundred twenty (120) days** after the date when the Contract Times commence to run. The Contract Times will commence to run on the thirteenth (13th) day after the

<sup>&</sup>lt;sup>2</sup>A description of the Instrumentation for single and paired wells is on Page 142

<sup>&</sup>lt;sup>3</sup>Sites 3, 6 and 7 are paired wells; one 2 inch well and one 4 inch well

<sup>&</sup>lt;sup>4</sup>Description on Page 144

<sup>&</sup>lt;sup>5</sup>Description on Page 144

<sup>\*</sup> Global Weather Station shall be WE800 from Global Water or Davis wireless Vantage Pro2 and include the following additional sensors: 1) WE100 Barametric Pressure Sensor, 2) WE300 Solar Radiation Sensor, 3) Hardware for WE300, 4) BC100 Smart Battery Charger, 5) EP180 Evaporation Pan, 7) RG600 Rain Gauge, 8" Tipping Bucket, and 8) SP102 Solar Panel as part of the quote.

	of the Agreement.		
G.	Communications concerning this Bid h Section 00100 of ITB 19-029.	ave been addresse	d only to the contacts listed in Article 23 of
	Submitted on:	, 20	
If Bio	dder is an Individual		
11	the second		(SEAL)
Indi	ividual's name:		
Sig	nature:		
Doi	ng business as:		
Bus	siness address:		
Pho	one No.:		
<u>If Bio</u>	dder is a Partnership		<b></b>
Par	tnership's name:		(SEAL)
Sta	te in which organized:		
Тур	e of partnership:		
Nar	me of general partner:		
Sig	nature:		
Bus	siness address:		
Pho	one No.:		

Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty (30) days after the Effective Date

If Bidder is a Corporation:	(CEAL)
Corporation's name:	(SEAL)
State of incorporation:	
Name of authorized person to sign:	
Title:	
Signature:	
Date of qualification to do business:	
Attest:	
Business address:	
Phone No.:	
<u>If Bidder is a Joint Venture</u>	
If Bidder is a Joint Venture  Name 1:	(SEAL)
	(SEAL)
Name 1:	(SEAL)
Name 1: Signature 1:	(SEAL)
Name 1: Signature 1: Address 1:	(SEAL)
Name 1: Signature 1: Address 1: Name 2:	(SEAL)

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above for an individual or the appropriate form of entity.)

#### **Data Format for Submission of Hydrologic Data**

Hydrologic data to be submitted to the Southwest Florida Water Management District should be directed to:

Hydrologic Data Section Attn.: Asmita Shukla

HydroDataSubmittals@swfwmd.state.fl.us

Any questions should be addressed to: Asmita Shukla, Lead Hydrologic Data Analyst Asmita.Shukla@WaterMatters.org 1-352-796-7211, extension 4316 1-800-423-1476 (toll-free, Florida only)

Each file provided must include a header record describing the contents, submitter's name, agency, and contact information including telephone number and e-mail address.

Data must be submitted in comma-delimited text format, one reading per line. Data from multiple stations may be included in one file, since the record format, as identified below, clearly identifies the station identification number for each reading.

#### **Data Format**

All data provided must conform to the format described below. Please include all of these fields shown for each record:

- 1. Station identification number (SID) These **must** be obtained before submitting data.
- 2. Data parameter (see Table 1 for a list of common parameters).
- 3. Units of measure
- 4. Date and time of reading (e.g., 05/02/2019 14:00:00 i.e. MM/DD/YYYY HH:MM:SS). For daily data, use 23:59:00 as the time (e.g., 05/03/2019 23:59:00).
- 5. Data value (Water-level gauge elevations must be converted to elevation in feet relative to NGVD29 or NAVD88 [specify as indicated below, by choice of data parameter] prior to submission.) NAVD88 is preferred.
- 6. Data value status (quality) code (see Table 2).
- 7. If the data being submitted are daily, please specify if they are daily maximum (MAX), minimum (MIN), mean (MEAN). In case of instantaneous readings, use "INST".
- 8. Instrumentation (manual, recorder).
- 9. Data Remark, if any.

#### Examples:

SID,Parameter,Units,Date/Time(EST),Data Value,Status/Quality Code,Statistic,Instrument,Data Remark 12345,water elevation (NAVD88),Feet,05/31/2019 14:00:00,42.76,1, INST,MANUAL,For verification purpose 383838,Discharge,cubic foot per second,04/29/2018 23:59:00,11.24,1,MEAN,CONREC,Collected for Contract# Z694

#### **Transfer Methods**

Preferred transfer method is by email to <a href="https://example.com/hydroDataSubmittals@swfwmd.state.fl.us">hydroDataSubmittals@swfwmd.state.fl.us</a> or, for large data files, please contact Asmita Shukla at Asmita. Shukla@swfwmd.state.fl.us.

**Table 1. Common Data Parameters** 

PARAMETER NAME (To be included in the
file)
Water elevation, NGVD29
Water elevation, NAVD88
Gage Height
Discharge
Air temperature
Wind direction from true North
Wind speed
Stream velocity
Discharge, tidally filtered

**Table 2. Data Value Status/Quality Codes** 

QUALITY CODE	QUALITY DESCRIPTION	
1	Good continuous records	
2	Good-quality edited data	
26 Good daily-read records		
79	Fewer than 24 values in daily aggregate	
95	Estimated	
140 Data unchecked		
154	Less than ("dry" reading)	
155	Greater than (gauge under water)	
255*	Could not locate site, site destroyed, weeds too high to read the gauge, no access to site, gage missing, data missing, out of service	

<sup>\*</sup> When using 255 as quality code, please make sure that the data value is null.

# SWFWMD requirements for stream stage and discharge measurement

#### Minimum Tasks

- Measure stream discharge bi-monthly including a point-of-zero-flow (PZF) determination.
- Verify measurement plots on current rating. Make second measurement if not within 5% of rating. Document why measurement does not agree with current rating.
- Measure one low base flow (non-zero) per year.
- Measure one high-water measurement per year above gage height.
- Develop new discharge rating if needed.
- Define and justify any shifts to current rating.
- Record water stage and or flow hourly.
- Use approved USGS methods for all discharge measurements and discharge ratings, as described below.
- Measure flow using current meters approved by the District Project Manager, as described below.

## **Accepted Methodology and Standards**

- Daily mean streamflow, measured in cubic feet per second, will be calculated using discharge ratings and shift curves by discharge measurements and PZF's as described in USGS TWRI Computation of Continuous Records of Streamflow by E.J. Kennedy.
- Shift adjustments will be applied and discharge computed according to USGS TWRI Computation of Continuous Streamflow Records by E.J. Kennedy, and USGS Water Supply Paper 2175 Measurement and Computation of Streamflow: Volume 2. Computation of Discharge by S.E. Rantz and others.
- The techniques and policies described in the USGS TWRI Discharge
   Measurements at Gaging Stations by T. J. Buchanan and W.P. Somers and
   USGS Water Supply Paper 2175 Measurement and Computation of Streamflow:
   Volume 1. Measurement of Stage and Discharge by S.E. Rantz and others will be
   rigidly adhered to.
- Standard discharge measurement notes will be completed for each measurement and include SWFWMD site identification (SID) number, station name, sequential measurement number, date, time inside, outside and recorder readings at the beginning and end of each measurement, spin test, total area, width, mean velocity, discharge, and remarks. All measurements will include notes as to the quality of the measurement, control conditions in the stream that may affect the gauge height/discharge relation, and a PZF (if applicable).

# **Accepted Measurement Techniques**

Price AA and pygmy current meters used to determine stream velocity will be
maintained according to USGS TWRI Calibration and Maintenance of Vertical
Axis Type Current Meters by G.F. Smoot and C.E. Novak. Measurements of
velocity in streams made using the Price-AA meter will be made as described in
the USGS TWRI, Discharge Measurements at Gaging Stations by Buchanan and
Somers. All meters will be cared for and maintained using USGS TWRI, Care
and Maintenance of Vertical Axis Current Meters for guidance.

- Acoustic Doppler Current Profiler (ADCP) measurements will be performed following the guidelines established in the most recent ADCP Manuals by RD Instruments (1994) or later, and the (USGS) Quality Assurance Plan, Lipscomb (1995). The ADCP is a very recent flow-monitoring device, therefore, the user or Contractor should adopt flow measuring strategies in compliance with the RD Instruments' Manual. Otherwise, the methodology used should be discussed and agreed upon with District staff before implementation.
- Acoustic Current Meter (ACM) measurements will be conducted as defined in the ACM Manual by EG&G Marine Instruments (1993) or later and/or as directed by District staff. Any other measurement technique using the ACM shall be submitted for District approval before implementation.
- Measurements using the Dye-Dilution Technique will be conducted as described in the most recent version of the Model 10-AU-005 Field Fluorometer User's manual or in the USGS Techniques of Water Resources Investigations by Kilpatrick and Cobb (1985). Any other flow measurement approach using the Dye-Dilution Technique shall be submitted for District approval before implementation.

## Minimum site installation and maintenance requirements

- All stage/discharge sites will be assigned a District Station ID (SID). All
  correspondence and data records will carry this SID.
- Install at least one reference monument (RM), elevation referenced to NAVD88, constructed to District standards, plus a District-approved staff gauge at each gaging station.
- Annually (or more often if needed) check levels on staff gauge and recorder measuring point using the Reference Monument. Newly constructed sites shall have levels checked every six (6) months until the platform ceases to settle more than 0.02 feet in the 6-month period. After the 6-month period, level checks shall be conducted annually.
- Conduct a pre-contract visit with the District Project Manager to determine status
  of existing gaging platform structures. Make repairs to structures, as necessary.
   Construct new gaging platforms when requested by the District Project Manager.
- Perform routine service of recorders and sensors on bi-monthly visits, unless equipment failure requires more frequent visits.
- Maintain clean area (i.e., no debris, vegetation trimmed) within ten feet of gaging station.

#### Deliverables

The following products will be delivered to the District monthly, no later than 30 days after completion of field trip:

- Fully quality-assured hourly and/or daily mean stage and flow data and current rating table in electronic format provided by the District's Hydrologic Data Section.
- All original discharge measurement notes and original logger inspection, including the current rating table and any shifts or datum corrections.
- Any notes pertaining to the quality of the data shall be included in all correspondence, both monthly and year-end.













